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REPORTS

FROM

COMMISSIONERS:

SIXTEEN VOLUMES.

—(*14.*)—

SHANNON NAVIGATION:

FOURTH REPORT;—Part I.

Session

5 February——27 *August* 1839.

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REPORTS FROM COMMISSIONERS:

1839.

SIXTEEN VOLUMES:—CONTENTS OF THE

FOURTEENTH VOLUME.

N. B.—*THE* Figures *at the* beginning of the line, *correspond with the* N° *at the foot of each* Report; *and the* Figures *at the* end of the line, *refer to the* MS. Paging *of the Volumes arranged for The House of Commons.*

SHANNON NAVIGATION:

[172.] FOURTH REPORT of the COMMISSIONERS appointed under 5 & 6 WILL. IV. c. 67, for the Improvement of the NAVIGATION of the River *Shannon*; with ESTIMATES, MAPS, PLANS and APPENDIX;—PART I. - - - - - - - p. 1

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FOURTH REPORT

OF

THE COMMISSIONERS

APPOINTED PURSUANT TO THE ACT 5 & 6 WILLIAM IV., CAP. 67,

FOR THE

IMPROVEMENT OF THE NAVIGATION

OF THE

RIVER SHANNON;

WITH

MAPS, PLANS, AND ESTIMATES,

AND

AN APPENDIX.

Presented to both Houses of Parliament by Command of Her Majesty.

DUBLIN:
PRINTED BY ALEXANDER THOM, 86, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.

1839.

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FOURTH REPORT

OF THE

COMMISSIONERS FOR THE IMPROVEMENT OF THE RIVER SHANNON,

UNDER THE ACT OF 5 AND 6 WILLIAM IV. C. 67.

TO THE LORDS COMMISSIONERS OF HER MAJESTY'S TREASURY.

May it please your Lordships,

SINCE the period of submitting our last Report, dated 24th May, 1838, we have continued the investigations required by the Act of 5th and 6th William IV., cap. 67. Our former operations comprehended the considerations connected with the state of the River Shannon up to Tarmonbarry, comprising the first, second, and third Divisions, detailed in our First and Second Reports; we have now to report on the remaining two Divisions, up to Lough Allen, which, to a certain degree, may be said to complete the service with which we have been charged.

Having, in the Reports referred to, submitted to your Lordships the general principles of the measures which we proposed for the Improvement of the Shannon below Tarmonbarry, and those which we contemplate for the upper part of the River, being, with the exception of the scale, similar in their nature, it only remains for us to report on those particulars connected with the Upper Shannon which we deem worthy of your Lordships' consideration.

Our proceedings involve two operations, which are perfectly distinct, on each of which we shall report separately:—

1st. The Surveys, Designs, and Estimates for the Works which we consider necessary for the improvement of the Navigation and Drainage, are treated of in this Report; and,

2nd. The Valuation of those Lands, Premises, or Rights, not included in our Third Report, that it will be necessary to purchase for the purpose of carrying the proposed Works into execution.

FOURTH DIVISION.

FROM TARMONBARRY TO LEITRIM.

FOURTH DIVISION. From Tarmonbarry to Leitrim.

The general character of the Shannon from Tarmonbarry to the Town of Leitrim, a distance of 30 miles, is that of broad and deep waters, occasionally widening out into small lakes, which bear the names of—

Lough Forbes, 3 miles long, and ½ a mile mean breadth.
,, Boffin, 2½ miles long, and ½ a mile mean breadth.
,, Sconnell, 2 miles long, and ½ a mile mean breadth.
,, Boedarrig, 2 miles long, and ¾ of a mile mean breadth.
,, Tap, ½ a mile long, and ½ a mile mean breadth.
,, Nanogue, ¼ of a mile long, and about the same in breadth.
,, Corry, 1½ mile long, and ¼ of a mile mean breadth.

In this distance the whole of the falls amount, in the aggregate, to 18

FOURTH DIVISION. From Tarmonbarry to Leitrim.

feet; they are now passed by 3 locks, viz.: at Cloondrah, Rooskey, and Jamestown. Several natural shoals are to be met with in this portion of the River, the obstructions created by which are greatly increased by the eel-weirs which have been established on them; this is particularly the case immediately at Rooskey Bridge, and at Jamestown; there is also a mill-dam at the latter place, which is very injurious.

Where there are absolute falls in the river impracticable to boats of burden, lateral cuts with locks have been constructed; but, being on a scale insufficient for the class, and loading of vessels that can navigate the two Canals to Dublin, and the outlet to Limerick, they are worked at a great disadvantage. The Works moreover, (in contemplation of the projected improvements and alterations) since the issuing of this Commission, have been barely kept in working order; and the intervening shoals have been only so far opened as to admit of the Navigation being conveniently practicable when the waters are above the ordinary summer level.

The immediate banks of the river and lakes are usually flat, and very little raised above the surface of the water; they are consequently flooded, for considerable portions of every year, to a degree very prejudicial to the productive capability of the lands. For the purpose of exhibiting the duration of the several floods in this part of the river, we have had Tables prepared, (from the Registry of the Heights of Water kept at the several Locks,) showing the number of days in each of the last three years, that the floods in the several stages described in the Tables have remained at the heights therein mentioned. These Tables are marked Appendix A, No. 1.

Appendix A, p. 32.

Appendix A, p. 36.

We have also had Tables prepared, marked Appendix A, No. 2, showing the average rate of rise or fall of the waters in the several Reaches of the River, comprised in the upper part of the Shannon. These Tables are also deduced from the Registry kept by the Lock-keepers, (which we have appended to this Report,) and show the changes to which the River is liable, and the average number of days in which these changes take place.

These Tables, besides furnishing the requisite data for forming the necessary calculations for the execution of the Works, will be found useful after their completion, as affording the best means of comparing the results recorded by them with those which may be similarly obtained at that time.

Two considerable Tributaries enter the Shannon within this District, (exclusive of the Camlin, which falls into it near Tarmonbarry Bridge,) namely, the Carnadoe and the Boyle Waters, both bearing very much the same character as the Shannon itself, the perceptible current of the waters except at the falls and some of the shoals, being very small.

It will be perceived that the Shannon, in this Division of the River, can only be efficiently made available as a medium of communication by the use of steamers for passage vessels, and for towing; the stream is too wide and irregular for towing paths, the construction and maintenance of which, (even if practicable throughout the whole distance) would be attended with a far heavier expense than will be incurred in rendering the scale of the Navigation suitable for steamers; and sails, the only other resource, are of but little avail for any regular traffic.

Among the Works proposed for this Division, are two of considerable magnitude and expense, namely, the Side-cuts or Canals at Cloondrah and Jamestown. The great object to be obtained by these Works is the connexion of the Navigation of the Middle with the Upper Shannon, on a scale suitable for steam vessels of considerable size.

These Side-cuts might be dispensed with, by removing the shoals (chiefly composed of limestone rock) which occur in the bed of the River; and in executing the Works, we think it desirable that a further examination and comparison of the expense of the two projects should be made, as it is possible that by adhering to the channel of the River, a considerable diminution may be made in the expense, but the length of the Navigation will be increased.

About 400 yards above the village of Leitrim, we propose that a small Landing-quay and Harbour should be formed, which will be the terminus of the steam navigation of the Upper Shannon; and when the proposed Works shall have been completed, there will be, from Killaloe to this point, an uninterrupted steam navigation on the Shannon, for a distance of 115 miles.

Fourth Division. From Tarmonbarry to Leitrim.

Between Leitrim Harbour and the commencement of the Lough Allen Canal, the course of the River is so tortuous that it could not be made available for steam vessels without incurring much expense, but a towing path may be easily constructed between these points, by means of which barges can be tracked, without difficulty, by horses.

The object of the proposed Works.

Proposed Works.

1st. To remove the Shoals, Eel-weirs, Mill-dams, projecting points, and other obstructions to the Navigation and Drainage.

2nd. To improve or replace the lateral cuts and Locks by whatever Works may be necessary to establish them on a proper basis, suited to the views adopted by us.

It is satisfactory for us to state that, after having long and attentively considered the scale for the Works on this part of the Navigation, we see no reason to alter the recommendations offered by us in our First Report; and, in now adopting them, we consider that the levels comprehending the two principal Lakes (Lough Derg and Lough Ree) and the space between them, alone require the adaptation of the Navigation to the large class of steamers that are necessary on those peculiarly broad waters; and that from Tarmonbarry upwards, a smaller class of steamers will be capable of conducting the trade, and be amply sufficient for all the present and prospective wants of the country. The Locks and Canals are therefore proposed to be arranged accordingly, the former to have chambers 130 feet long, and 30 feet wide, and the side Canals to have 80 feet water surface.

3rd. To construct Dams at the heads of the Falls, with a view of regulating the maintenance and discharge of the waters, keeping them to a summer level of 6 feet on the proposed Lock-sills, which will ensure at all times sufficient depth for the Navigation, and giving the Weirs at the same time sufficient extent for the rapid discharge of the superabundant water in times of flood.

4th. Securing such Bridges as may be affected by any of the proposed operations; enlarging their water-way where necessary, and applying swivel or bascule bridges where the Navigation will require a passage through them.

FIFTH DIVISION.

From Leitrim to Lough Allen.

Fifth Division. From Leitrim to Lough Allen.

Description of the River.

In this distance of 4½ miles, there is a difference of level of 20 feet, and the course of the River is so generally impeded by shoals, rapids, &c. &c., that a Canal has been constructed for the entire extent. There are two locks on this Canal, and the whole will require considerable improvement; to widen it, so as to allow steam-boats to pass, would imply a total reconstruction of the Canal, and require a large expenditure; but as at present the traffic is small, and likely to be so for some years, until the Arigna Iron Works and the adjacent Coal Fields can be opened and worked extensively, it is proposed at present, to make only such alterations in the locks as may be necessary when the intended regulation of the waters of the Shannon shall be carried into effect; to clear out and deepen the Canal in part; to raise and form the towing paths; and, generally, to put the Works into full repair and working order, on their present scale, at the same time making the alterations in such a manner as to serve as part of a more extended improvement whenever the exigencies of an increased trade shall render such necessary.

At the head of this Canal, at its entrance into Lough Allen, we propose that a small harbour, or landing-quay, should be constructed, considering this the most eligible site for that purpose, as serving both the traffic of Lough Allen and the improving market of the village of Drumshanbo, distant half a mile from this point.

From the site of the proposed harbour to Reilly's Island, in Lough Allen, there are a few shoals, through which it will be necessary to dredge a channel; beyond this the lake is very deep and extensive, with a gradually improving district around.

Fifth Division. From Leitrim to Lough Allen.

Lough Allen is 8¼ miles long, and about 2 miles average breadth, and will be most efficiently navigated by steam vessels whenever the trade shall become sufficiently extensive to justify their use.

Understanding that it is intended to pull down the existing dilapidated bridge at Battle Bridge, and that a new one is about to be erected by the adjoining Counties, we have marked upon Pl. No. 76, the site which appears to us best suited for it, both as regards the level at which the road would cross the proposed improved navigation, and the facilities which the site offers for forming a very superior line of road to that which at present exists from the town of Leitrim.

TRIBUTARIES.

The Tributaries.

The only Tributaries of consideration, in this part of the Shannon, are within the Fourth Division, viz., the Carnadoe and Boyle Waters; and we have included them in our operations.

Carnadoe.

We have had estimates prepared for removing the obstructions and opening the Carnadoe Waters, which will enable steam vessels to navigate this Tributary for a distance of six miles from the Shannon, and to approach within two miles of Strokestown.

Boyle.

Considering the Town of Boyle, and the great extent of improvable country around it and Lough Key, as entitled to peculiar consideration; and looking upon the Boyle Water, generally, as calculated, when improved, to become one of the chief feeders to the traffic of the Upper Shannon, we have estimated the cost of rendering Lough Key accessible to Steam Vessels, and prepared plans for the same. These Works, when completed, will extend steam navigation 9½ miles from the Shannon, and to the Boat House Ford, within 1½ miles of the Town of Boyle, the furthest point to which it is practicable to carry the Navigation, without a very considerable outlay, there being a difference of level of 34 feet from the Bridge of Boyle to this point, and the River falling through a narrow valley over a bed of rock.

We have included with the Plans and Sections, made under our direction, a Section (Pl. No. 103) furnished to us by the Ordnance Survey Department, made by Lieut. E. W. Durnford, R.E., showing the ridge of land running between Lough Arrow and Lough Key. The water from the former runs towards the sea near Sligo, and the water from the latter flows into the Shannon, near the Town of Carrick-on-Shannon; the horizontal distance between these Loughs is 1,613 yards, and the difference of level between their waters is 41 feet 8 inches, Lough Arrow being on the highest level.

Tributaries of the Lower or First Division of the Shannon.

River Fergus.

During the last summer a deputation of several members of Parliament, and other gentlemen connected with the Town of Ennis, waited upon Sir J. F. Burgoyne, in London, and urged upon his attention, as one of the Commissioners for the Improvement of the Navigation of the Shannon, the importance of opening the navigation of the River Fergus for sea-going vessels, and towards which desirable object, they stated that voluntary contributions to a considerable amount would be subscribed by different gentlemen of the County of Clare. Shortly afterwards a meeting appears to have been held at Ennis, and a Committee appointed to receive subscriptions; the Secretary to this Committee put himself in communication with us, and forwarded a list containing the names of individuals who had become subscribers to the fund for the contemplated improvements; at the head of this list appeared the name of Colonel Wyndham for £5,000, and the amount subscribed at that time was near £7,000. We therefore directed Mr. Henry Buck, Civil Engineer, to make the necessary survey and estimate of the expense, in order that we might compare it with the estimates of Mr. Killaly and Mr. Grantham. An application was also made to us by the Secretary, on the part of the Committee, requesting us to direct a survey to be made of the ground for the cut from Gore's-quay to the Town of Ennis, as proposed by Mr. Grantham; this was directed to be made. On the com-

pletion of the surveys, having attentively considered the different projects, and compared the estimates, we decided upon the site as proposed by Mr. Buck, as being more easily executed, offering greater facilities of approach, and the best situated for the general purposes of trade. The Plans and Surveys accompany this Report, and the estimate for the proposed improvement, including the purchase of land, amounts to £26,352. THE TRIBUTARIES.

The expense of this operation, it thus appears, would be very heavy, and so out of proportion to the amount subscribed, even including the magnificent offer by one individual, which is more than two-thirds of the whole amount of voluntary contribution, that we cannot venture, at the present time, upon any recommendation for its accomplishment; and moreover, all the Baronies of the County of Clare, bounded by the Shannon, are already assessed in certain sums for the Works recommended in our Second Report. For these reasons we think it desirable that the Plan for constructing a landing wharf at Clare, as recommended in our Second Report, should be the one adopted.

A navigation for small vessels, say between 100 and 200 tons, might be effected for about £16,000, but that would be a half measure, and not presenting by any means sufficient advantages for the outlay.

River Cashen.

At the solicitation of certain proprietors, we caused an examination to be made, by Mr. Buck, of the Cashen River, which falls into the great Estuary on the County Kerry side, below Ballybunnion. Considering the great expense that must be incurred to effect any very sensible improvement—that the obstructions are of a nature peculiarly liable to return, and to require constant subsequent outlay for maintenance—as also that the locality can scarcely be comprehended within the Shannon, we do not think that we should be justified in including with our present recommendations, any Estimate for Works to be executed on the Cashen River.

The Tributaries of the Third Division.

Scarriff.

We have included among the Plans accompanying this Report, the survey of the River Scarriff, which, by dredging a few shoals of small extent, and excavating a channel, for a short distance, through limestone rock, and adjusting the sharp turns in the river-course, can be made navigable for steam tugs, nearly up to the Town of Tomgreany, in the County of Clare, where a landing quay is proposed to be formed; thus rendering the Navigation of the Shannon available to the fertile and extensive agricultural district near to it, the produce from which is now carried by a long land journey to Limerick, which is the nearest market town and shipping port.

Lower Brusna.

Mr. Rhodes, some years ago, made a very accurate survey of the Lower Brusna River, with an estimate of the expense of *canalizing* it, and extending the advantages of a water communication from the Shannon to Parsonstown, a Navigation which is considered to be of great importance. As the Plans, Sections, and Estimate made by him, which accompany the Report printed for Parliament in 1832, contain the chief information requisite upon this subject, we have not included this Tributary amongst our operations.

We are authorised by the Act of Parliament to consider the Tributaries generally, but we have not thought it necessary or advisable at present to make any extensive surveys connected with those which may be considered of secondary importance, and particularly where the operations connected with the improvement of the Navigation of the Shannon itself did not affect or interfere with these Tributaries beyond the first fall, but several have been adverted to. Of others of small extent, such as the Rossmore, Ballyshrule, and Cappagh Rivers, great portions of the surveys have been completed, which will be available whenever it shall be necessary to lay down any projects for their improvement, and we can enter upon the consideration of others, in any degree your Lordships may require.

ESTIMATES.

ESTIMATES.

As on former occasions, we have gone into great detail respecting the several Works to be executed, and have prepared a great number and variety of Plans and Sections which we trust will, with the descriptive details appended to this Report, afford every necessary explanation.

ESTIMATES.

In order to bring under one view the entire of the expenses to be incurred for the execution of the Works recommended in our several Reports, as well as the amount for compensation in respect to the purchase of the Lands, Houses, &c., the following Tables, which are appended to this Report, have been prepared:—

See Page 10.

No. 1, Estimates of the Cost of the Works proposed between Lough Ree and Lough Allen, including the Scarriff River, Carnadoe and Boyle Waters, treated of in this Report, and amounting to £243,974 15*s.* 9*d.*

See Page 11.

No. 2, contains an Abstract of the Estimates, showing the Cost of the several Works, from the mouth of the Shannon to Lough Allen, with the Amount for Compensation, and the proportion to be paid by the adjoining Counties, Baronies, &c.

See Page 13.

No. 3, is a General Abstract, showing the total Amount of the Estimates for the proposed Works, from the mouth of the Shannon to Lough Allen, a distance of 151 miles. This Abstract also shows the Amount awarded as Compensation for the purchase of Lands, Houses, Mills, &c. Total Amount, £584,805 17*s* 9½*d.*

Which is to be defrayed in the following manner:—

	£	s.	d.
Proportion to be paid by the Public, - - - - - -	290,716	1	4
" " by the adjoining Counties and Baronies, -	266,334	6	2¼
" " by Proprietors and Districts, - - - -	27,755	10	3¼
Total, - -	£584,805	17	9½

See Page 14.

No. 4, is a Table showing the Proportions to be Assessed upon the Counties and Baronies, from Limerick to Lough Allen.

GENERAL OBSERVATIONS.

GENERAL OBSERVATIONS.

In concluding this our Fourth Report, we beg to observe, that in carrying into effect your Lordships' instructions, we have endeavoured, in each case, to submit and recommend such Works as, after a careful investigation and consideration, appeared to us to be the most suitable for effecting the improvements required. Still we confess, that on ascertaining the amount necessary to complete the whole, we felt much regret in finding the sum had considerably exceeded our original expectations, but on reconsidering every important item, we are unable to propose any material alteration without sensibly diminishing the general value and efficiency of the Works.

It is true that the amount proposed to be assessed on the different Counties and Districts is considerable, and in the cases of the Counties of Roscommon and Leitrim, very large, but those Counties will derive much more direct benefit from the improvement of the Shannon Navigation and that of its principal Tributaries, than any other, and if the gross amount of assessment be divided into a considerable number of instalments, the debt may be liquidated without very materially increasing the annual taxation, and, in the end, the increased prices for all kinds of agricultural produce, which must result from the additional facility and cheapness of transport to Dublin, and to the British markets, as well as the improved state of the Callows after the waters shall have been duly regulated, will more than compensate for the temporary sacrifice. Besides, it is to be observed, that the disbursements in each case will be double the amount levied; and as nearly the whole expenditure will be for labour, the inhabitants of the Districts adjoining the Shannon, which are to be assessed, will really receive in wages double the amount of the assessment, and by this means the labouring population will be materially benefited, and through them, the proprietors of the surrounding estates, as well as the merchants and tradesmen.

Notwithstanding these considerations, should the Counties adjoining the Upper Shannon, namely, that portion which extends between Tarmonbarry and Lough Allen, object to the amount of the proposed assessment, and should such objections be deemed insuperable, the most important part of this great national improvement need not be abandoned. We refer particularly to that portion called the Middle Shannon, which is 85 miles in length, which extends between Killaloe and Tarmonbarry, and which connects the port of Limerick with that of Dublin, through the medium of the Grand and Royal Canals, as already described in our Second Report. This district includes two great lakes, Lough Derg and Lough Ree, and only two locks are necessary to render the Navigation suitable for steamers of a large class;

here the whole of the Works, as recommended, are indispensable, and their completion would produce very important results; but from Tarmonbarry up to Leitrim, a distance of 30 miles, where the falls in the River are more frequent, and, in consequence, the expense proportionably increased, although we should regret the adoption of half measures, a modification might be made which would greatly diminish the expense, namely, by reducing the dimensions of the locks and side-cuts. This plan would still admit of the application of steam vessels, but of inferior dimensions and efficiency. General Observations.

Should the Legislature think proper to sanction the projects recommended in these Reports, and order them to be carried into execution, we beg to remind your Lordships, that the Works will be more efficiently and economically performed, by providing for their being executed with energy and with as little delay as possible.

We would also particularly recommend, that all the purchases of fishing Weirs, Mills, Lands, and Premises be made at once; because,

1st. It will be injurious to the proprietors, occupiers, and to the premises themselves, to leave them under an uncertainty as to the limit of the present tenure.

2ndly. By obtaining early possession, a degree of relief may be given to flooded lands at once; partial trials may be made of the effect of removing obstructions; and most useful preparatory measures taken for the future Works; and,

3rdly. There will not be, as might be supposed, an immediate sacrifice of the outlay, because the Commissioners will be enabled to obtain a return in the shape of rent for a considerable portion, even for many that will eventually be removed.

The whole amount for the compensation, on account of purchases required to be made, as awarded by us, comes to £74,054 2*s.* 0½*d.*, for which it is estimated that a permanent return will be obtained of £51,288 14*s.* 6*d.*, exclusive of Fisheries, and an additional temporary return for some of those, such as Mills, &c., that are to remain for some time.

As connected with the improvements, we have furnished in our Second Report, Plans and Estimates for new Bridges at Athlone and Banagher, both of which are now in a very dangerous and neglected state.

The reconstruction of these bridges on a proper scale has necessarily been included in our estimates, and will be among the earliest operations attended to, should the recommendations in our Report be carried into execution.

It will be very desirable that this point should be ascertained as early as possible, as it is to be presumed that, should the improvements of the Shannon, as a public measure, be deferred or delayed, the Counties interested in the maintenance of the communications across the River, would immediately take some steps for their improvement.

All which we humbly submit to your Lordships' consideration.

J. F. BURGOYNE, (L.S.)
HARRY D. JONES, (L.S.)
RICHARD GRIFFITH, (L.S.)
W. CUBITT, (L.S.)
THO. RHODES, (L.S.)

Dublin, *February* 21, 1839.

Estimates.

No. 1.

Estimates of the Cost of the Works proposed between Lough Ree and Lough Allen, and including the Scarriff River, Carnadoe and Boyle Waters.

	———	Amount.	Total.
	Part of the Third Division.	£ s. d.	£ s. d.
From Athlone to Tarmonbarry.	Crompawn, - - - - - - -	782 8 3	
	Cloonbearlaw, - - - - - - -	625 4 7	
	Lanesborough to Tarmonbarry and Cloondrah Lock, (Dredging),	3,353 7 0	
	Addition to be made to Estimates published in Second Report, page 23, for Curreen, Lanesborough, Kilnacarrow, Erra, and Lodge Cut, revised upon the completion of the Surveys,	1,665 9 7	6,426 9 5
	The Fourth Division.		
From Tarmonbarry to Lough Nanogue.	Cloondrah Canal, - - - - - - -	47,152 4 6	
	Tarmonbarry, (the River Course,) - - - -	14,189 8 0	
	Lough Forbes, - - - - - - -	1,148 4 4	
	Clooneen Cox and Cloonfad, - - - -	6,815 12 0	
	Bird Island, - - - - - -	2,544 6 11	
	Rooskey, - - - - - - - -	24,443 9 7	
	Derrycarne, - - - - - - -	653 4 4	
	Lough Tap and Skeagh Point, - - - -	1,738 19 3	98,685 8 11
From Lough Nanogue to Leitrim.	Lough Nanogue, (Dredging,) - - - -	40 0 0	
	Jamestown Canal, - - - - - - -	29,227 7 0	
	Drumsna, - - - - - - - -	1,506 12 2	
	Mount Campbell and Charlestown, - - - -	540 6 0	
	Jamestown, - - - - - - -	6,350 2 0	
	Kilbride Deer Park, - - - - - - -	358 5 0	
	Doyle's Islands, - - - - - - -	550 6 0	
	Cornacorroo, - - - - - - -	1,196 6 6	
	Innishmucker, - - - - - - -	249 12 6	
	Grose's Islands, - - - - - - -	569 8 2	
	Carrick-on-Shannon, - - - - - -	8,425 10 0	
	Corriolus Point, - - - - - - -	27 0 0	
	Dredging between Mouth of the Boyle Water and Hartley, -	45 15 4	
	Hartley, - - - - - - - -	48 13 0	
	Port, - - - - - - - -	630 15 2	
	Leitrim, - - - - - - - -	3,100 0 6	52,865 19 4
	Total of the Fourth Division, - -	....	151,551 8 3
	The Fifth Division.		
From Leitrim to Lough Allen.	Battle Bridge, - - - - - - -	5,581 1 8	
	Lough Allen Canal, - - - - - -	4,235 0 0	
	Drumshanbo Harbour, (at Head of Lough Allen Canal,) -	2,292 3 0	
	Bealantra, and River course, - - - -	2,892 2 4	
	Arigna River, (Cut at Mount Allen,) - - -	1,215 15 0	
	Lough Allen, - - - - - - -	1,541 2 10	
	Total of the Fifth Division, - -		17,757 4 10
	For Steam Dredging Vessels, Barges, &c., - - -	4,000 0 0	
	Work Shops, Pile Engines, Machinery, &c. afloat and on shore, and including Contingencies for the proposed Works of the Shannon, - - - - - -	12,000 0 0	
	Total for Working Apparatus, Contingencies, &c.,		16,000 0 0
	The Tributaries.		
	The Scarriff River, - - - - - -	4,133 11 6	4,133 11 6
	For Improving the Navigation of the Tributaries between Killaloe and Tarmonbarry, - - -	5,000 0 0	5,000 0 0
Carnadoe Water; length, 6 Miles.	Carnadoe, - - - - - - - -	8,803 1 2	
	Carrigeen, - - - - - - - -	4,914 11 9	13,717 12 11
The Boyle Water; length, 9¼ Miles.	Tumna, - - - - - - - -	639 9 6	
	Annaleckey, - - - - - - - -	1,454 9 0	
	Doctor's Weir, - - - - - - -	819 14 0	
	Cloonacarrow, - - - - - - -	339 18 0	
	Cootehall, - - - - - - - -	6,858 4 0	
	Oak Port Lough, - - - - - - -	83 8 4	
	Oxhill Island, - - - - - - -	761 8 2	
	Knockvicar, - - - - - - - -	15,184 15 2	
	Beacons in Lough Key, - - - - - -	40 0 0	
	Boyle River, - - - - - - - -	3,207 2 8	
	Total for the Boyle Water, - -		29,388 8 10

GENERAL TOTAL, - £243,974 15 9

No. 2.

ABSTRACT OF THE ESTIMATES, showing the Cost of the several Works proposed for the Improvement of the River Shannon, and the undermentioned Tributaries, together with the Amount of Compensation Awarded for the Premises required at the site of each Work, and the proportionate Share of the Total Amount of each to be paid by the Public, by the Proprietors, and by the adjoining Districts, Counties, and Baronies.

Name of District.	Name of Place at which each Work is proposed.	Estimated Cost of the Works.	Amount of Compensation Awarded for Premises required.	Total Amount.	Amount: Of Portion to be paid by the Public.	Amount: Of Portion to be paid by the District.	Amount: Of Portion to be paid by the Proprietors.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
FIRST DIVISION. Lower Shannon, Extending from Kilcradaan Head to Limerick; distance, 45 miles; and including the Fergus, Deel or Askeaton, and Maigue Rivers.	Kilrush Pier, - -	8,600 0 0	0 5 0	8,600 5 0	4,300 2 6	2,150 1 3	2,150 1 3
	Carrigaholt Pier, -	5,600 0 0	0 5 0	5,600 5 0	2,800 2 6	—	2,800 2 6
	Tarbert, - - -	8,600 0 0	0 5 0	8,600 5 0	4,300 2 6	2,150 1 3	2,150 1 3
	Querrin Creek, - -	1,160 0 0	0 5 0	1,160 5 0	580 2 6	—	580 2 6
	Ballylongford, - -	1,839 0 0	0 5 0	1,839 5 0	919 12 6	—	919 12 6
	Glynn, - - -	5,879 0 0	0 5 0	5,879 5 0	2,939 12 6	—	2,939 12 6
	Foynes' Island, - -	8,500 0 0	0 5 0	8,500 5 0	4,250 2 6	—	4,250 2 6
	Kilteery, - - -	1,836 0 0	0 5 0	1,836 5 0	918 2 6	—	918 2 6
	Cahircon, (Kildysart), -	1,986 0 0	0 5 0	1,986 5 0	662 1 8	662 1 8	662 1 8
	Clare, - - -	4,400 0 0	64 10 5	4,464 10 5	1,488 3 5¾	2,976 6 11¼	—
	Deel or Askeaton River,	900 0 0	0 5 0	900 5 0	300 1 8	300 1 8	300 1 8
	Maigue River, - -	2,770 0 0	0 5 0	2,770 5 0	923 8 4	923 8 4	923 8 4
	Total of First Division,	52,070 0 0	67 5 5	52,137 5 5	24,381 15 1¾	9,162 1 1¼	18,593 9 2

Name of District.	Name of Place at which each Work is proposed.	Estimated Cost of the Works.	Amount of Compensation Awarded for Premises required.	Total Amount.	Amount: Of Portion to be paid by the Public.	Amount: Of Portion to be paid by the adjoining Counties and Baronies.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
SECOND DIVISION. Limerick to Killaloe; Distance, 15 miles.	Arthur's Ferry, (Illanarone) -	7,600 0 0	138 12 11½	7,738 12 11½	3,869 6 5¾	3,869 6 5¾
	River Shannon at Plassey, -	3,000 0 0	79 10 0	3,079 10 0	1,539 15 0	1,539 15 0
	Castle Connell, - - - -	7,600 0 0	817 18 11½	8,417 18 11½	4,208 19 5¾	4,208 19 5¾
	O'Brien's Bridge, Parteen Rapid, and other Shoals in the River between Errina and Cussaan Locks, - -	4,000 0 0	360 10 1	4,360 10 1	2,180 5 0½	2,180 5 0½
	Limerick Navigation, - -	—	12,227 18 7	12,227 18 7	6,113 19 3½	6,113 19 3½
	Total of Second Division, -	22,200 0 0	13,624 10 7	35,824 10 7	17.912 5 3½	17.912 5 3½
THIRD DIVISION. Killaloe to Meelick; Distance, 32 miles.	Killaloe, - - - -	27,000 0 0	4,924 15 4	31,924 15 4	15,962 7 8	15.962 7 8
	Lough Derg, - - - -	300 0 0	—	300 0 0	150 0 0	150 0 0
	Derry Island, - - - -	460 0 0	—	460 0 0	230 0 0	230 0 0
	White's Ford, - - - -	550 0 0	—	550 0 0	275 0 0	275 0 0
		28,310 0 0	4,924 15 4	33,234 15 4	16,617 7 8	16,617 7 8
Meelick to Athlone; Distance, 27½ miles.	Works at Meelick, - - -	40,000 0 0	9,286 4 11½	49,286 4 11½	24,643 2 5¾	24,643 2 5¾
	Shannon Grove, (Counsellor's Ford,) - - - -	1,277 0 0	83 6 8	1,360 6 8	680 3 4	680 3 4
	Works at Banagher, - -	25,000 0 0	4,364 3 1	29,364 3 1	14,682 1 6½	14,682 1 6½
	Shannon Harbour (Bridge) -	500 0 0	—	500 0 0	250 0 0	250 0 0
	Leahinch, - - - -	550 0 0	50 0 0	600 0 0	300 0 0	300 0 0
	Derryholmes, - - - -	2,200 0 0	—	2,200 0 0	1,100 0 0	1,100 0 0
	Bishop's Island, - - -	2,200 0 0	2 0 0	2,202 0 0	1,101 0 0	1,101 0 0
	Garrymore, - - - -	950 0 0	—	950 0 0	475 0 0	475 0 0
	Shannon Bridge, (Cut or Canal below ditto,) - -	100 0 0	0 12 11	100 12 11	50 6 5½	50 6 5½
	Ditto, (Improvements at) -	7,000 0 0	952 14 4	7,952 14 4	3,976 7 2	3,976 7 2
	Clerhaun, - - - -	170 0 0	—	170 0 0	85 0 0	85 0 0
	Ballynatave, - - - -	350 0 0	116 3 4	466 3 4	233 1 8	233 1 8
	Tullymore Ford, - - -	2,050 0 0	—	2,050 0 0	1,025 0 0	1,025 0 0
	Calf Island, - - - -	400 0 0	—	400 0 0	200 0 0	200 0 0
	Long Island, - - - -	550 0 0	—	550 0 0	275 0 0	275 0 0
	Rann Island, - - - -	850 0 0	—	850 0 0	425 0 0	425 0 0
	Middle Shannon, Grand Canal Co.	—	5 0 0	5 0 0	2 10 0	2 10 0
		84.147 0 0	14,860 5 3½	99,007 5 3½	49,503 12 7¾	49,503 12 7¾
Athlone to Tarmonbarry; Distance, 26 miles. * The sum placed opposite the Names thus marked [*] is the amount of the revised Estimate.	Works at Athlone, - - -	60,000 0 0	27,697 17 10	87,697 17 10	43,848 18 11	43,848 18 11
	Lough Ree, - - - -	500 0 0	—	500 0 0	250 0 0	250 0 0
	*Curreen, - - - - -	2,470 0 10	—	2,470 0 10	1,235 0 5	1,235 0 5
	*Lanesborough, - - -	8,667 8 1	203 10 10	8,870 18 11	4,435 9 5½	4,435 9 5½
	*Kilnacarrow, - - - -	959 19 5	22 19 4	982 18 9	491 9 4½	491 9 4½
	Crompawn, - - - -	782 8 3	—	782 8 3	391 4 1½	391 4 1½
	*Erra, - - - - -	760 3 8	—	760 3 8	380 1 10	380 1 10
	Cloonbearlaw, - - - -	625 4 7	—	625 4 7	312 12 3½	312 12 3½
	*Lodge Cut, - - - -	4,357 17 7	25 8 9	4,383 6 4	2,191 13 2	2,191 13 2
	Lanesborough to Tarmonbarry and Cloondrah Lock, (dredging) - - - -	3,353 7 0	—	3,353 7 0	1,676 13 6	1,676 13 6
		82,476 9 5	27,949 16 9	110.426 6 2	55.213 3 1	55,213 3 1
	Total of Third Division, -	194.933 9 5	47,734 17 4½	242,668 6 9½	121,334 3 4¾	121,334 3 4¾

No. 2.—*Continued.*

ABSTRACT OF THE ESTIMATES, showing the COST of the several WORKS proposed for the IMPROVEMENT of the RIVER SHANNON, and the undermentioned TRIBUTARIES, together with the AMOUNT of COMPENSATION Awarded for the PREMISES required at the site of each WORK, and the proportionate Share of the TOTAL AMOUNT of each to be paid by the PUBLIC, by the PROPRIETORS, and by the adjoining DISTRICTS, COUNTIES, and BARONIES.—*Continued.*

Name of District.	Name of Place at which each Work is proposed.	Estimated Cost of the Work.	Amount of Compensation Awarded for Premises required.	Total Amount.	Amount. Of Portion to be paid by the Public.	Amount. Of Portion to be paid by the adjoining Counties and Baronies.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
FOURTH DIVISION. TARMONBARRY to LEITRIM; Distance 30 miles.	Cloondrah Canal,	47,152 4 6	1,366 7 11	48,518 12 5	24,259 6 2½	24.259 6 2½
	Tarmonbarry, (the River Course,)	14,189 8 0	1,095 5 9	15,284 13 9	7,642 6 10½	7,642 6 10½
	Lough Forbes,	1.148 4 4	41 13 4	1,189 17 8	594 18 10	594 18 10
	Clooneen Cox and Cloonfad,	6,815 12 0	36 9 2	6,852 1 2	3,426 0 7	3,426 0 7
	Bird Island,	2,544 6 11	2,507 15 3	29,495 11 9	14,747 15 10½	14,747 15 10½
	Rooskey,	24,443 9 7				
	Derrycarne,	653 4 4	—	653 4 4	326 12 2	326 12 2
	Lough Tap and Skeagh Point,	1,738 19 3	—	1,738 19 3	869 9 7½	869 9 7½
	Lough Nanogue (dredging),	40 0 0	—	40 0 0	20 0 0	20 0 0
	Jamestown Canal,	29.227 7 0	772 3 11	29,999 10 11	14,999 15 5½	14,999 15 5½
	Drumsna,	1,506 12 2	—	1,506 12 2	753 6 1	753 6 1
	Mount Campbell and Charlestown,	540 6 0	150 0 0	690 6 0	345 3 0	345 3 0
	Jamestown,	6,350 2 0	3,170 0 1	9,520 2 1	4,760 1 0½	4,760 1 0½
	Kilbride Deer Park,	358 5 0	—	358 5 0	179 2 6	179 2 6
	Doyle's Islands,	550 6 0	6 6 8	556 12 8	278 6 4	278 6 4
	Cornacorroo,	1,196 6 6	1 0 0	1,197 6 6	598 13 3	598 13 3
	Innishmucker,	249 12 6	—	249 12 6	124 16 3	124 16 3
	Grose's Islands,	569 8 2	3 19 10	573 8 0	286 14 0	286 14 0
	Carrick-on-Shannon,	8,425 10 0	377 4 9	8,802 14 9	4,401 7 4½	4,401 7 4½
	Corriolus Point (dredging),	27 0 0	—	27 0 0	13 10 0	13 10 0
	Dredging between the mouth of the Boyle Water and Hartley,	45 15 4	—	45 15 4	22 17 8	22 17 8
	Hartley,	48 13 0	—	48 13 0	24 6 6	24 6 6
	Port,	630 15 2	40 12 7	671 7 9	335 13 10½	335 13 10½
	Leitrim,	3.100 0 6	723 7 2	3,823 7 8	1,911 13 10	1,911 13 10
	Total of Fourth Division,	151.551 8 3	10.292 6 5	161,843 14 8	80.921 17 4	80,921 17 4
FIFTH DIVISION. THE CANAL NAVIGATION from Battle Bridge to Lough Allen, 4½ miles, including the Works proposed on the River Course and in Lough Allen.	Battle Bridge,	5,581 1 8	145 0 0	5,726 1 8	2.863 0 10	2.863 0 10
	Lough Allen Canal,	4,235 0 0	—	4,235 0 0	2,117 10 0	2,117 10 0
	Drumshanbo Harbour, at the head of Lough Allen Canal,	2.292 3 0	55 13 2	2.347 16 2	1,173 18 1	1,173 18 1
	Bealantra and River Course,	2,892 2 4	518 13 4	3.410 15 8	1,705 7 10	1,705 7 10
	Arigna River, cut at Mountallen,	1.215 15 0	77 12 8	1.293 7 8	646 13 10	646 13 10
	Lough Allen,	1,541 2 10	—	1,541 2 10	770 11 5	770 11 5
	Upper Shannon Navigation, (Board of Public Works,)	—	0 1 0	0 1 0	0 0 6	0 0 6
	Total of Fifth Division,	17.757 4 10	797 0 2	18.554 5 0	9.277 2 6	9.277 2 6
	Two Dredging Vessels, Barges, &c.	8,000 0 0	—	8,000 0 0	4,000 0 0	4,000 0 0
	Workshops, Pile Engines, Machinery, afloat and on shore, including Contingencies,	12,000 0 0	—	12,000 0 0	6,000 0 0	6,000 0 0
	Total for Working Apparatus and Contingencies.	20,000 0 0	—	20,000 0 0	10,000 0 0	10,000 0 0
THE TRIBUTARIES. SCARRIFF RIVER.—Length from the Shannon, to the termination of the proposed Navigation, 1½ miles.	- - - - - - -	4.133 11 6	—	4.133 11 6	2,066 15 9	2,066 15 9
	For improving the Navigation of the Tributaries between Killaloe and Tarmonbarry,	5.000 0 0	—	5.000 0 0	2,500 0 0	2.500 0 0
THE CARNADOE WATER. Length from the Shannon, 6 miles.	Carnadoe (Shoal at Bridge,)	8.803 1 2	98 0 2	8,901 1 4	4,450 10 8	4,450 10 8
	Carrigeen,	4.914 11 9	—	4,914 11 9	2,457 5 10½	2,457 5 10½
	.Total for the Carnadoe Water,	13.717 12 11	98 0 2	13.815 13 1	6,907 16 6½	6,907 16 6½
THE BOYLE WATER. Length from the Shannon to the termination of proposed Navigation, 9¼ miles.	Tumna,	639 9 6	—	639 9 6	319 14 9	319 14 9
	Annalecky,	1,454 9 0	103 7 11	2,377 10 11	1,188 15 5½	1,188 15 5½
	Doctor's-weir,	819 14 0				
	Cloonacarrow,	339 18 0	31 2 1	371 0 1	185 10 0½	185 10 0½
	Cootehall,	6,858 4 0	42 16 11	6,901 0 11	3,450 10 5½	3,450 10 5½
	Oakport Lough,	83 8 4	—	83 8 4	41 14 2	41 14 2
	Oxhill Island,	761 8 2	26 3 6	787 11 8	393 15 10	393 15 10
	Knockvicar,	15,184 15 2	1,236 11 6	16,421 6 8	8,210 13 4	8,210 13 4
	Beacons in Lough Key,	40 0 0	—	40 0 0	20 0 0	20 0 0
	Boyle River,	3,207 2 8	—	3,207 2 8	1.603 11 4	1,603 11 4
	Total for the Boyle Water,	29,388 8 10	1.440 1 11	30,828 10 9	15,414 5 4½	15,414 5 4½
	Total for the Tributaries,	52.239 13 3	1,538 2 1	53,777 15 4	26,888 17 8	26,888 17 8

No. 3.

GENERAL ABSTRACT,

Showing the TOTAL AMOUNT of the ESTIMATES for the Proposed WORKS, and also the AMOUNT AWARDED as COMPENSATION for the PREMISES required to be purchased.

——	Estimated Cost of the Work.	Amount of Compensation Awarded.	Total Amount.	Proportion of Total Amount. To be defrayed by the Public.	To be defrayed by the adjoining Counties & Baronies	To be defrayed by the Proprietors and District.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
FIRST DIVISION.						
THE LOWER SHANNON, extending from Kilcradaan Head to Limerick, distance 45 miles, and including the Fergus, Deel or Askeaton, and Maigue Rivers, - -	52,070 0 0	67 5 5	52,137 5 5	24,381 15 1¾	—	27,755 10 3¼
SECOND DIVISION.						
LIMERICK to KILLALOE, distance 15 miles, including the Canal Navigation and River Course, - - - - -	22,200 0 0	13,624 10 7	35,824 10 7	17,912 5 3½	17,912 5 3½	—
THIRD DIVISION.						
KILLALOE to TARMONBARRY, distance 85½ miles.						
Killaloe to Meelick, 32 miles	28,310 0 0	4,924 15 4	33,234 15 4	16,617 7 8	16,617 7 8	—
Meelick to Athlone, 27½ do.	84,147 0 0	14,860 5 3½	99,007 5 3½	49,503 12 7¾	49,503 12 7¾	—
Athlone to Tarmonbarry, 26 miles, - - - -	82,476 9 5*	27,949 16 9	110,426 6 2	55,213 3 1	55,213 3 1	—
Total of Third Division,	194,933 9 5	47,734 17 4½	242,668 6 9½	121,334 3 4¾	121,334 3 4¾	—
FOURTH DIVISION.						
TARMONBARRY to LEITRIM, distance 30 miles,	151,551 8 3	10,292 6 5	161,843 14 8	80,921 17 4	80,921 17 4	—
FIFTH DIVISION.						
LOUGH ALLEN CANAL, from LEITRIM to LOUGH ALLEN, 4½ miles, including dredging in Lough Allen, &c., - - - -	17,757 4 10	797 0 2	18,554 5 0	9,277 2 6	9,277 2 6	—
Two Steam Dredging Vessels and Barges, -	8,000 0 0	—	20,000 0 0	10,000 0 0	10,000 0 0	—
Workshops, Machinery, Pile Engines afloat and on shore, Contingencies, &c. - - - -	12,000 0 0					
GENERAL TOTAL for the SHANNON, - - - -	458,512 2 6	72,515 19 11½	531,028 2 5½	263,827 3 8	239,445 8 6¼	27,755 10 3¼
THE TRIBUTARIES.						
The Scarriff River, - -	4,133 11 6	—	4,133 11 6	2,066 15 9	2,066 15 9	—
For improving the Navigation of the Tributaries between Killaloe and Tarmonbarry, -	5,000 0 0	—	5,000 0 0	2,500 0 0	2,500 0 0	—
The Carnadoe Water, -	13,717 12 11	98 0 2	13,815 13 1	6,907 16 6½	6,907 16 6½	—
The Boyle Water, - -	29,388 8 10	1,440 1 11	30,828 10 9	15,414 5 4½	15,414 5 4½	—
TOTAL for TRIBUTARIES,	52,239 13 3	1,538 2 1	53,777 15 4	26,888 17 8	26,888 17 8	—
GENERAL TOTAL for the SHANNON and TRIBUTARIES, - - -	510,751 15 9	74,054 2 0½	584,805 17 9½	290,716 1 4	266,334 6 2¼	27,755 10 3¼

GENERAL TOTAL.

	£ s. d.
Proportion to be paid by the Public, - - - - - - - -	290,716 1 4
" " adjoining Counties and Baronies, - -	266,334 6 2¼
" " Proprietors and Districts, - - - -	27,755 10 3¼
TOTAL, (including £40,000 for Bridges on the Shannon,) -	£584,805 17 9½

J. F. BURGOYNE.
HARRY D. JONES.
RICHARD GRIFFITH.
W. CUBITT.
THO. RHODES.

DUBLIN, 21*st February*, 1839.

* This sum is the amount of the revised Estimates.

No. 4.

TABLE OF PROPORTIONATE NUMBERS,

Prepared in accordance with the Act 5th and 6th Wm. IV., cap. 67,

SHOWING the relative AMOUNT of BENEFIT anticipated to result to the undermentioned COUNTIES and BARONIES, upon the IMPROVEMENT of the SHANNON and its TRIBUTARIES, from LIMERICK to LOUGH ALLEN, and the proportion in which (according to said Act) it is proposed to Assess said COUNTIES and BARONIES for one Moiety of the Expense.

Name of County to be Assessed.	Proportion, or Total Number of Parts to be Assessed on the Counties.	Proportion or Number of Parts to be Assessed on the undermentioned Baronies.		Proportion, or Number of Parts to be Assessed on the remainder of the County.
		Name.	No. of Parts.	
LIMERICK, - - -	6	—	—	—
LIMERICK, County of the City,	4	—	—	—
CLARE, - - - - -	14	Tullagh, Upper & Lower Bunratty, Eastern part of	6	8
TIPPERARY, - - -	20	Owney and Arra Lower Ormond Upper Ormond	12	8
GALWAY, - - -	39	Leitrim Longford Clonmacnoon Killyan Ballymoe	19	20
ROSCOMMON, - - -	76	Moycarn Athlone Ballintobber, South Roscommon Ballintobber, North Boyle	57	19
KING'S COUNTY, -	13	Garrycastle Firgal or Eglish	5	8
WESTMEATH, - - -	26	Cloonlonan Brawney Kilkenny West	9	17
LONGFORD, - - -	20	Rathcline Moydow Longford	8	12
LEITRIM, - - - -	39	Mohill Leitrim Drumahair	29	10
MAYO, - - - - -	5	Costelloe	1	4
SLIGO, - - - - -	5	Coolavin Corran (part of) Tirrerill (part of)	5	—
Total, - -	267			

LIST OF MAPS, PLANS, ELEVATIONS, AND SECTIONS.

List of Maps, Plans, Elevations, and Sections.

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6. Section of River Shannon, from Curreen Ford on Lough Ree, to Tarmonbarry and Cloondrah.
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10. General Section of the River Course, from Lough Corry to Battle Bridge.
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15. Diagram Section showing the Levels of Low Summer-Water, Winter-Floods, Highest Points of the Shoals, Proposed Regulating Weirs, and Reduced Levels of the Water-Surface of that part of the River extending from Lough Nanogue to Lough Allen.
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61. Jamestown Canal, Plan.
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Details of Plans.

Pl. No. 1.—*Index Map of River Shannon, from Lough Ree to Lough Allen.*

Index Map of the River Shannon from Lough Ree to Lough Allen, showing the portions of the counties of Roscommon, Sligo, Longford, Leitrim, and Cavan, and their principal towns communicating with the River; also the lakes, rivers, and tributary streams falling into it. Pl. 1.

Pl. No. 2.—*General Plan of River Shannon, from Curreen Ford on Lough Ree to Tarmonbarry,*

Showing the sites of the several shoals which it is proposed to remove to perfect the navigation and drainage. Pl. 2.

The proposed improvements are tinted red; the sailing course is shown by a dotted line, and the soundings are marked in feet and inches.

Pl. No. 3.—*General Plan of River, from Tarmonbarry to Lough Nanogue, opposite Jamestown Canal.*

This plan shows the parts adjacent to the River, as far as the line of high floods; and the sites of the proposed improvements are shown by a red tint; the sailing course is marked by a dotted line; and the soundings are marked in feet and inches. Pl. 3.

Pl. No. 4.—*Plan of that part of the River extending from Lough Tap to the Boyle Water.*

This is a General Plan, (reduced from the Ordnance Survey,) representing the sites of the several shoals proposed to be lowered in this portion of the Shannon, together with the general extent of the flooded lands. The line of the general section of the River course shown on Pl. No. 9, and part of Pl. No. 10, is represented by a dotted line, and the numbers of the plates on which are represented the details of each work proposed to be executed are also marked on this plan. Pl. 4.

Pl. No. 5.—*Plan of that part of the River extending from the Boyle Water to Lough Allen.*

This is a continuation of the last described General Plan, and represents in the same manner the sites of the several proposed Works, together with the numbers of the plates on which are to be found the details. Pl. 5.

Upon this plan is shown the proposed terminus of the steam navigation between Leitrim and Battle Bridge, whence to Lough Allen, the navigation is at present effected by a Canal constructed about the year 1814, and called "the Lough Allen Canal;" this Canal is proposed to be improved, and the boats towed in the usual manner by horses. Upon this plan is also represented Lough Allen and the adjacent country, including the Arigna Iron Mines, and the principal fields of coal in this district, together with that portion of the Shannon, north of Lough Allen, which is at present navigable, and which may at a future period, when the trade shall require it, be considerably improved by a small expenditure.

Pl. No. 6.—*Section of River Shannon from Curreen Shoal, on Lough Ree, to Tarmonbarry and Cloondrah,*

Showing the several shoals and eel-weirs to be removed to complete the navigation, and perfect the drainage between Athlone and Tarmonbarry. Pl. 6.

Pl. No. 7.—*General Section of River, from Tarmonbarry to Lough Nanogue.* (*These refer to Pl. No.* 3.)

These sections show the shoals which require to be cleared away, or partially deepened and regulated: the general line of deepening is described, and its relative level is expressed by dimensions figured from a datum line, being the same datum line as that upon the section in plate No. 6. Pl. 7.

Pl. No. 8.—*Sections of the present Lines of Navigation at Cloondrah and Rooskey.* (*These Sections refer to Pls. Nos.* 2 *and* 3.)

No. 1.—Section of the line from Lodge Cut, through Cloondrah Canal, and along the Camlin River to Lough Forbes, by which the shoal at Tarmonbarry is avoided—from *a* on pl. 2, to *b* on pl. 3. Pl. 8.

No. 2.—Section of the navigation by the Canal at Rooskey.—*c* to *d*, pl. 3.

Pls. Nos. 9, 10, and 11.—*General Section of the River Course, from Lough Tap to Lough Allen.*

The general features of the bed of the River, and the materials of which it is composed, (as far as it was necessary for the purposes of the Works to ascertain them,) are fully described upon this section. In all the shoal parts, the materials of which they are composed Pls. 9, 10, 11.

DETAILS OF PLANS. have been carefully ascertained by numerous borings, which are more fully represented on the detailed drawings, the numbers of which are referred to on the general section. In those parts of the River where the surface of the rock has been ascertained from actual observations, either by borings or soundings, it is represented on the section by a strongly defined line. Where either of these means were not available, or where the depth of the water rendered it unnecessary to prosecute the inquiry, the geological features of the section have been determined as nearly as possible from those of the surrounding district.

The general extent of the excavation necessary to be made, for the purposes either of the navigation, or of a due regulation of the flood-waters, is represented by a red tint upon this section, together with the height of the summer-water and ordinary winter-floods, the proposed regulating weirs, and the proposed reduced levels of the water-surface. Upon Pl. Pl. 9. No. 9, is also represented a longitudinal section through the centre of the proposed improved Pl. 11. Jamestown Canal; and on Pl. No. 11, is represented a longitudinal section of the Lough Allen Canal, showing the proposed alterations in the lock at Battle Bridge, and the deepening required to be made in the upper level of the Canal, so as to afford 6 feet 6 inches water at the proposed reduced level of water-surface in Lough Allen, namely, 5 feet on the upper sill of Drumleague Lock, which is the height of the low summer-water of Lough Allen.

The *Datum Level* (with reference to which all these sections are drawn and figured,) is the *Upper Sill of Jamestown Lock*, which has also been used as the datum level for all the sections of the Boyle Water, and that part of the Upper Shannon extending from Lough Tap to Lough Allen.

Pl. No. 12.—*Levels of Locks from Lanesborough to Rooskey,*

Pl. 12. Showing the relative levels of the present locks at Lanesborough and Cloondrah, with the proposed improved levels. It will be seen, that the proposed level of water-surface to be retained by the weir at Athlone, will extend to Cloondrah, a distance of 26 miles.

Pl. No. 13.—*Diagram Section, showing the Levels of the Lock Sills, from Rooskey to Lough Allen.*

Pl. 13. This section is drawn at a large scale of height (4 feet to the inch), but without reference to any fixed scale of length, in order to show at one view, the relative heights of the sills of the present locks on that part of the navigation described in the title, and of the sills of the proposed locks which will be necessary to be constructed to suit the proposed improvements in the navigation, and in the regulation of the level of water in the different reaches of the river communicating with these locks.

Pl. No. 14.—*Levels of proposed Weirs at Tarmonbarry and Rooskey.*

Pl. 14. This plate shows the forms and dimensions, with the manner of construction, of the proposed weirs, and diagram plans of their respective sites.

Pl. No. 15.—*Diagram Section, showing the Levels of the low Summer-Water, Winter-Floods, highest points of the Shoals, proposed regulating Weirs, and reduced Levels of Water-Surface of that part of the River extending from Lough Nanogue to Lough Allen.*

Pl. 15. This section is drawn at a large scale of height (4 feet to the inch), but without reference to any fixed scale of length, and has been prepared in this way for the purpose of showing at one view, the general result of numerous observations which have been made on this part of the River, in order to ascertain the height, and duration of the floods, and the influence which the several shoals and other obstructions in the River have upon the floods, in preventing their free and equable discharge. The heights of the several flood lines are figured on the section with reference to the datum level.

The length of each reach of the River, the total fall of water in summer and winter, and the rate of fall per mile are noted, together with the present sectional area of discharge at Carrick Bridge, in the several states of the floods, and at low summer-water; the velocity in feet per second is also given.

The obstacles which eel-weirs, and other artificial obstructions in the River, oppose to the free discharge of the water, can readily be perceived on examining the section, but especially in the case of the Jamestown mill-dam and eel-weirs, which, owing to their height, construction, and extent, as also their situation at the natural discharging point of the long reach of river and lakes above them, serve to keep up the floods of this portion of the Shannon to a greater height, and with more injurious effect, than on the reach of the River, either above this portion, at Lough Allen, or below it, on Loughs Boffin and Bodarrig. The influence of these obstructions is felt along the Shannon, as far as the foot of the falls at Drumherriff, a distance of 13 miles; and along the Boyle Water to Lough Key, and beyond it on the Boyle River, as far as the Boat-house Ford, near Boyle, a distance of 16¼ miles.

Pl. No. 16.—*Curreen—Plan and Sections of Shoal.*

Pl. 16. Figure 1.—Plan of shoal. The navigation here is very circuitous; much facility will be afforded to vessels plying between Athlone and Lanesborough, by straightening the sailing course, and erecting two beacons at each end of it. The red lines mark the proposed sailing course, which is to be 150 feet wide at bottom.

Figures 2, 3, and 4.—Sections showing the extent of the shoal, and the required deepening; see Registry of Borings, page 74.—Estimate, £2,470 0*s.* 10*d.*

Details of Plans.

Pl. No. 17.—*Lanesborough—Plans and Sections of Shoal.*

Figure 1.—Plan of the River in its present state, showing the several weirs, embankments, walls, lock, lock-house, and the north-western arch of the bridge which is to be removed for the proposed improvements. Pl. 17.

Figure 3.—Plan of the River when the proposed improvements shall have been made.

Figures 2 and 4.—Longitudinal sections showing the extent of shoal and the required deepening; also the proposed quay-wall and harbour.

It is proposed to deepen the bed of the River, and construct on the present site a new harbour and quay-walls; the face to be rough punched ashlar-masonry, backed with good rubble work.

Pl. No. 18.—*Lanesborough—Transverse Sections of Shoal, having reference to Pl. No.* 17.

Figures 1, 2, 3, 4, 5, 6, and 7.—Sections of shoal showing the eel-weirs to be cleared away, the quay-walls and harbour to be built; also the required excavation. Pl. 18.

Pl. No. 19.—*Lanesborough Bridge.*

Plans, section, and elevation, showing the proposed improvements. Pl. 19.

The piers of the bridge to be underpinned with good rough punched ashlar-masonry, to a depth of 12 inches under the proposed bed of the River.

The Canal arch, lock-house, and north-western arch of the present bridge to be taken down for a swivel-bridge and toll-house; see Registry of Borings, page 74.—Estimate, £8,667 8*s.* 1*d.*

Pl. No. 20.—*Killnacarrow—Plan and Sections of Shoal.*

Figure 1.—Plan of shoal, showing the proposed improvements to deepen the River, and remove the islands now forming obstructions to the free passage of the waters. Pl. 20.

Figures 2, 3, and 4.—Sections showing the required deepening; see Registry of Borings, page 76.—Estimate, £959 19*s.* 5*d.*

Pl. No. 21.—*Crompawn—Plan and Sections of Shoal.*

Figure 1.—Plan of shoal, showing the proposed sailing course, which is to be 150 feet wide at bottom. Pl. 21.

Figures 2, 3, 4, and 5.—Sections showing the extent of the shoal, and the required deepening to perfect the navigation and drainage; see Registry of Borings, page 76.—Estimate, £782 8*s.* 3*d.*

Pl. No. 22.—*Erra—Plan and Sections of Shoal.*

Figure 1.—Plan showing the proposed sailing course, to be 150 feet wide at bottom. Pl. 22.

Figures 2, 3, and 4.—Sections showing the extent of shoal and the required excavation; see Registry of Borings, page 76.—Estimate, £760 3*s.* 8*d.*

Pl. No. 23.—*Cloonbearlaw—Plan and Sections of Shoal.*

Figure 1.—Plan of shoal, showing the proposed sailing course, which is to be 150 feet wide at bottom. Pl. 23.

Figures 2, 3, and 4.—Sections of shoal, showing the required excavation; see Registry of Borings, page 76.—Estimate, £625 4*s.* 7*d.*

Pl. No. 24.—*Lodge Cut—Plan and Sections of Shoal.*

Figure 1.—Plan of the shoal, which is extensive. It is proposed to clear away the Canal embankment and eel-weir, and to deepen the River for 150 feet wide at bottom. Pl. 24.

Figures 2, 3, 4, and 5.—Sections of shoal showing the proposed deepening; see Registry of Borings, page 76.—Estimate, £4,357 17*s.* 7*d.*

Pl. No. 25.—*Tarmonbarry—Plan of Shoal.*

This plan embraces the line of River from Tarmonbarry Bridge to Lough Forbes, and on it are marked the eel-weirs and islands to be removed. Pl. 25.

Pl. No. 26.—*Tarmonbarry—Longitudinal Section of Shoal.* (*See Pl. No.* 25.)

This plate represents the whole of the shoal from Tarmonbarry Bridge to Lough Forbes. The proposed deepening is marked by a red line, and the red tint shows the quantity of the shoal proposed to be cleared away, so as to produce an even inclined plane to Tarmonbarry Bridge, to promote the free passage of the flood-waters. Pl. 26.

Pl. No. 27.—*Tarmonbarry—Transverse Section of the River at the Bridge.* (*See Pl. No.* 25.)

This section shows the proposed deepening required to regulate the river-bed below the bridge, so as to facilitate the discharge of the waters from the weir to be erected above the bridge. See No. 1, pl. 25. Pl. 27.

Pl. No. 28.—*Tarmonbarry—Transverse Sections of Shoal.* (*See Pl. No.* 25.)

Sections taken above the bridge; one of them at the cluster of islands, (marked No. 2 in Pl. No. 25,) and the other at the summit of the shoal across the two upper eel-weirs (marked No. 3 in Pl. No. 25). The proposed channel to be deepened is shown by a red tint; see Registry of Borings, page 77.—Estimate, £14,189 8*s.* 0*d.* Pl. 28.

Pl. No. 29.—*General Plan of the Island of Cloondrah.*

This plan shows the River Shannon from Lough Forbes to Tarmonbarry; and the River Camlin, by which the navigation is at present carried on; also the proposed line of navigation across the island. Pl. 29.

DETAILS OF PLANS.

Pl. No. 30.—*Cloondrah—Plan of the proposed Canal.*

Pl. 30. This plan shows more particularly the lands through which the intended line of Canal will pass; and also that portion of the bog which will be intersected by it. As a line of navigation between Lodge Cut, below Cloondrah, and Lough Forbes, this Canal will be much shorter than the present navigation by the Camlin River, being little more than half its length.

Pl. No. 31.—*Cloondrah—Longitudinal Section of proposed Canal.* (*See Pl. No.* 30.)

Pl. 31. Upon this section is shown the nature of the soil and substratum through which the cutting will pass; the depth of the cutting, and rise of the lock.

Pl. No. 32.—*Cloondrah—Transverse Sections of proposed Canal.* (*See Pl. No.* 30, *Nos.* 1, 2, *and* 3.)

Pl. 32. Figure 1, shows the swivel-bridge proposed to be erected near the present lock-house.

Figure 2, is a section of the proposed Canal, taken at the summit of the high bog, showing the side slopes, towing path, &c.

Figure 3.—Section taken in the Callows, between the high bog and Lough Forbes; see Registry of Borings, page 78. Estimate, £47,152 4*s.* 6*d.*

Pl. No. 33.—*Lough Forbes—Plan of Shoal,*

Pl. 33. Showing the present sailing course, and the proposed improvement of the navigation through the thick patches of rushes and reeds in the middle of the Lough, nearly opposite the point of meadow on the Kilbarry side, County Roscommon.

Pl. No. 34.—*Lough Forbes—Longitudinal and Transverse Sections of the Shoal.* (*See Pl. No.* 33.)

Pl. 34. It is proposed to dredge to the required depth, a channel, described by red lines, 150 feet wide at bottom, sloping the sides in the proportion of 3 to 1; two substantial stone beacons to be erected to mark the sailing course. The required dredging is shown by a red tint; see Registry of Borings, page 79.—Estimate, £1,148 4*s.* 4*d.*

Pl. No. 35.—*Clooneen Cox and Cloonfad—Plan of Shoals.*

Pl. 35. The proposed improved line of navigation is described by red lines, and the sites are marked where it is proposed to erect stone beacons.

Pl. No. 36.—*Clooneen Cox—Sections of Shoal.*

Pl. 36. Two transverse sections of the shoal, showing the required excavation to form the proposed channel. (See Pl. No. 35, Nos. 1 and 2.)

Pl. 37. Pl. No. 37.—*Cloonfad—Two Transverse Sections of the Shoal.* (*See Pl. No.* 35, *Nos.* 3 *and* 4.)

Pl. No. 38.—(*See Pl. No.* 35.)

Pl. 38. Transverse section of the summit of the shoal at Cloonfad, taken across the eel-weirs; and also a longitudinal section of the shoals, taken along the middle of the river-course from Clooneen Cox to Cloonfad, showing the deepening required to form the proposed navigable course; see Registry of Borings, page 80.—Estimate £6,815 12*s.* 0*d.*

Pl. No. 39.—*Bird Island—Plan of Shoal.*

Pl. 39. This plan includes that portion of the River from the lower end of Bird Island to the tail of Rooskey Lock; also showing Cloonaffil and Rabbit Islands.

It is proposed to improve the navigation by clearing away Bird and Rabbit Islands, and part of Clonaffil, and forming a mid-channel, 150 feet wide, as shown by the red lines.

Pl. No. 40.—*Bird Island—Sections of Shoal.* (*See Pl. No.* 39, *Nos.* 1 & 2.)

Pl. 40. These sections show the required deepening to form the channel, and the sites for the new beacons to be erected to mark the sailing course.

Pl. No. 41.—*Bird Island—Transverse Section of Shoal.* (*See Pl. No.* 39.)

Pl. 41. Two sections, Nos. 3 and 4, Pl. 39, one of them taken at the stone beacons above the island; the other taken through Rabbit Island, showing the quantity of excavation required, and the retaining walls proposed to hold the spoil, and protect the lands below the lock.

Pl. No. 42.—*Bird Island—Longitudinal Section of Shoal.* (*See Pl. No.* 39.)

Pl. 42. This is taken from a point below the island, beginning in the middle of the River course, and going through Bird Island and Rabbit Island, up to the tail of Rooskey Lock; see Registry of Borings, page 80.—Estimate, £2,544 6*s.* 11*d.*

Pl. No. 43.—*Rooskey—Plan of Shoal.*

Pl. 43. This plan shows the River, with the eel-weirs and bridge, and the Canal by which the navigation is at present carried on; it also shows by red lines the proposed improvements, viz.:—the weir to be erected above the bridge, the channel to be cleared from the proposed weir to the tail of the lock below the bridge, and the enlarged dimensions of the Canal for the improvement of the navigation.

Pl. No. 44.—*Rooskey—Longitudinal Section of the Shoal.* (*See Pl. No.* 43.)

Pl. 44. Showing the eel-weirs which are to be cleared away, the line of deepening for the regulation of the river-bed, and the weir proposed to be erected above the bridge.

Pl. No. 45.—*Rooskey—Transverse Section of Shoal.* (*See Pl. No.* 43.) DETAILS OF PLANS.

Section of the navigation, with the proposed swivel-bridge across the Canal, and the proposed improvements to the bridge over the Shannon. Pl. 45.

Pl. No. 45 *A.—Rooskey—Longitudinal Section of Canal.*

This section shows the present Canal, and the proposed deepening for the improvement of the navigation; also the relative situation of the rock throughout the line, and the proposed swivel-bridge; see Registry of Borings, page 81.—Estimate, £24,443 9*s.* 7*d.*

Pl. No. 46.—*Derrycarne—Plan of Shoal.*

The red lines show the course proposed to be deepened, and the beacons to mark the same are also shown in red. Pl. 46.

Pls. Nos. 47, 48, 49.—*Derrycarne—Transverse and Longitudinal Sections of the Shoal.* (*See Pl. No.* 46.)

These sections show the required deepening to form the proposed sailing course, and also the sites for the proposed beacons; see Registry of Borings, page 83.—Estimate, £653 4*s.* 4*d.* Pl. 47, 48, 49.

Pls. Nos. 50, 51, 52.—*Lough Tap—Plan and Sections of Shoal.*

The red lines and tints show the proposed deepening, to form a navigable course 150 feet wide.—Estimate, £1,738 19*s.* 3*d.* Pls. 50, 51, 52.

Pl. No. 53.—*Transverse Sections of the Callow Lands near Carrick-on-Shannon.*

Upon this plate are represented three transverse sections of the Shannon and the Callows, or flooded lands, on its banks, in the vicinity of Carrick-on-Shannon, showing their height above the datum level, (the Upper Sill of Jamestown Lock,) and their formation and sub-strata, as ascertained by the several borings delineated thereon. Pl. 53.

These sections also show the heights of low summer-water, and of the several floods which occur in this reach of the River, and which are distinguished into,—Very high floods; ordinary winter floods; floods which last three months of the year; and floods which last six months in the year. The height of the proposed reduced level of the water-surface is also shown; by an inspection of these sections, therefore, the extent to which the Callows will be relieved from flood, may readily be perceived. Upon the section of the Callows between Grose's Island and Carrick-on-Shannon, a section of the mail coach road is shown, which is here flooded for a considerable distance, and frequently to a height of 3 or 4 feet.

Pls. Nos. 54 and 55.—*Drumsna—Plan and Sections of Harbour and Shoal.*

The plan represents the present small harbour or landing-quay, and its capabilities of extension, as the trade shall require, also the shoal opposite the harbour, extending up the River to the deep water below Mount Campbell Boat-house. This shoal is chiefly composed of shaly limestone, or calp, which can be easily excavated. It is proposed at present only to open a channel through this shoal, above the present harbour, to the depths shown upon the sections, of a sufficient breadth to give free discharge to the flood-waters; but opposite the harbour, and down to the deep water below it, it is proposed to lower the shoal to the depth of 6 feet 6 inches below the proposed reduced level (2 feet 8 inches below the present Upper Sill of Jamestown lock), so as to give ample room, and depth for trade-boats and steam tug-vessels to come up to the quay at all seasons of the year. Pl. 54.

Upon Pl. 55 is also represented an elevation of the Bridge of Drumsna, which at present requires much repair, and the piers of which it will be necessary to underpin when making the proposed excavation through the arches; see Registry of Borings, page 88.—Estimate, £1,506 12*s.* 2*d.* Pl. 55.

Pls. Nos. 56 and 57.—*Mount Campbell and Charlestown—Plan and Sections of Shoal.*

Upon Pl. 56 is represented the River course and shoal from the deep water below Mount Campbell Boat-house, to the deep water below Jamestown mill, showing the position of the eel-weirs which are proposed to be removed, and the breadth of the channel to be opened for the purpose of carrying off the flood-waters, and reducing the level of the water-surface (of that portion of the River which is immediately below the proposed mill-site at Jamestown) to the level proposed for the water-surface at Drumsna harbour. Pl. 56, 57.

The eel-weirs represented on the plan and sections, in conjunction with the shoal, serve at present to throw back the water up to Jamestown mill, as may be seen by reference to Pl. 15.

This shoal is composed partly of shaly calp, similar to that at Drumsna, and partly of gravel, as described on the longitudinal and transverse sections, upon which the proposed depth and breadth of the excavation is marked.

The soundings marked upon the plan indicate the depths of water below the low summer-water of the reaches of the River where they are placed.

For a detailed account of the borings, the sites of which are represented on the plan, see the Registry thereof, page 89.—Estimate, £540 6*s.* 0*d.*

Pls. 58, 59, and 60.—*Jamestown—Plan and Sections of Eel-weir, Shoal, and present Mill-dam.*

Pl. 58 is a plan of the River and present mill at Jamestown, showing the fishing-places, sluices, &c., in the bed of the river; as also the eel-weirs above the bridge, which stretch across the whole River course, leaving but two small passages for the discharge of the waters. Pl. 58.

The shoal extends from the small island above these eel-weirs down to the lake below the town, and is composed of gravel and limestone rock, a great portion of the former lying upon the latter.

Details of Plans. Upon the plan is also represented a proposed landing-quay, above Jamestown Bridge, also the proposed regulating-weir, and the improved mill-site, where a fall of 6 feet 2 inches can be had at all seasons of the year.

The breadth of the channel proposed to be excavated, in order to allow the waters to come with a full section down to the weir, is also marked upon the plan.

Pl. 59. Pl. 59 contains the longitudinal and transverse sections of the River course, upon which are represented the materials composing the shoal, (as ascertained by the borings,) and the depth and breadth of the proposed excavation, which is distinguished by a red tint. Upon this plate is also represented an elevation of the bridge, which is at present in a very neglected condition, and in want of immediate repairs. A proposed flood-arch is also represented on the Roscommon side of the bridge.

Pl. 60. Pl. 60 contains a detailed longitudinal section of the present mill-dam, with transverse sections thereof at different points, and a transverse section of the mill and kiln.

The top of many portions of this dam are 9 feet above the datum level, and about 3 feet above the level of a great portion of the low Callow lands for several miles up the River, which are but from 5 to 6 feet high above the same datum.

Upon this plan are also shown transverse sections of the River at the site of the proposed regulating-weir, showing its height, (3 feet 6 inches above the datum level,) and the required excavation.

For details of the borings, the sites of which are marked on the plan and sections, see the Registry of Borings, page 90.—Estimate, £6,350 2*s.* 0*d.*

Pls. 61, 62, and 63.—*The Jamestown Canal—Plan and Sections of the proposed Improvements.*

Pl. 61. Pl. 61 is a plan of the Canal at a scale of 200 feet to an inch, representing the present Canal, a portion of which, through the rock-cutting, is so narrow and ill constructed, that common trade boats, such as those on the Royal Canal, cannot, when laden, pass through it in low summer-water.

The Canal, as proposed to be improved to suit steam-vessels, is shown by a red tint, having 80 feet water-surface in embankment and ordinary cutting; and 70 feet in the rock-cutting. In embankment or cuttings through clay or gravel, the side slopes of the Canal are proposed to be paved with stone.

The present lock is proposed to be removed, and a new lock to be built in the site represented on the plan; the chamber to be 130 feet long, by 30 feet wide, and to have a rise of 6 feet 2 inches.

The two existing bridges must be removed, and swivel-bridges, 32 feet span each, erected on the sites marked on the plan; and for the purpose of improving the approaches thereto, it is proposed to make the alterations in the lines of road as delineated on the plan.

For the purpose of guarding against injury to the bank of the proposed Canal, between the sites of the present and proposed locks on the southern side of the Canal, it is intended to alter the course of the small river, called the Crooked River, to that delineated on the plan.

Pl. 62. Pl. 62.—Transverse sections of the present Canal; also showing an elevation of one of the present bridges, (namely, that near the termination of the Canal at Kilbride Deer-park,) and a design for the swivel-bridge proposed to be built on the site shown on the plan; and for which a solid rock foundation can be had, as shown on the section.

This Drawing also contains transverse sections across the present Canal, and the site of the proposed Canal, showing an old cut partially made, and the rock-cutting which it is requisite to make, in order to obtain a straight direction for the line of the latter.

Pl. 63. Pl. 63, contains several transverse sections of the present Canal, showing also the improved Canal in cutting and embankment, together with an elevation of the bridge on the Canal (on the road from Drumsna to Strokestown), and the proposed improvements. This Drawing also represents transverse sections of the present lock (to be removed) and the proposed lock, showing the counter-forts, the upper sill, and one-half of the upper gates.

In the site selected for this lock, an excellent foundation can be obtained, composed of very hard close gravel and clay upon rock, as represented on the section.

For the details of the borings, the sites of which are represented on the above plan and sections, see Registry of Borings, page 85.—Estimate, £29,227 7*s.* 0*d.*

Pl. No. 64.—*Kilbride Deer-park—Plan and Sections of Shoal.*

Pl. 64. This shoal, which is but of small extent, is distinguished on the plan from the deep part of the River by light water-lines, and the line representing the deep water (or 6 feet 6 inches below the proposed reduced level,) clearly defines its extent.

The proposed excavation, 150 feet wide, is represented on the plan by the red dotted lines.

It is proposed to excavate the shoal to the depth shown on the longitudinal and transverse sections, namely, 3 feet below the datum level, (the Upper Sill of Jamestown Lock.)

For details of borings, see Registry, page 92.—Estimate, £358 5*s.* 0*d.*

Pl. No. 65.—*Doyle's Islands—Plan and Sections of Shoal.*

Pl. 65. This shoal, which is chiefly composed of gravel, retained by a ledge of rock, which runs across the River, nearly in the line of the transverse section, is distinguished upon the plan in the same manner as on the last, and its extent similarly defined.

The proposed channel, (150 feet wide,) is to be excavated on the Leitrim side of the

Islands, as represented on the plan, and these being raised with the spoil, and planted with trees, will serve instead of beacons. Details of Plans.

The depth of the proposed excavation is represented on the longitudinal and transverse sections, as also the nature of the materials to be removed.

For details of borings, see Registry, page 93.—Estimate, £550 6*s.* 0*d.*

Pl. No. 66.—*Cornacorroo—Plan and Sections of Shoal.*

The plan represents the extent of the shoal, which is distinguished from the deep part of the River in the manner before described. Pl. 66.

The shoal is divided into two parts by a deep basin intervening at the turn in the River, which is here so sudden as to be nearly equal to a right angle.

The shoal, as represented on the sections, is composed of gravel and clay mixed, and the obstruction that it offers to the discharge of the waters is further increased by the ruins of old eel-weirs, shown on the plan, which stretch nearly across the whole River course, with the exception of a small channel which has been within a few years back cleared through it, for the purpose of navigation.

The present navigable channel, which has but 3 feet 6 inches or 4 feet water at the time of low summer-water, is defined by large beacons of rubble-masonry, shown upon the plan; these are proposed to be removed, and a new channel formed, in the direction indicated on the plan by the red dotted lines, which is so designed as to render the present sudden turn in the River as gradual as possible.

The depth of the proposed channel, and the extent of the required excavation, are shown upon the sections.

For details of the borings, see the Registry of Borings, page 93.—Estimate, £1,196 6*s.* 6*d.*

Pl. No. 67.—*Innishmucker—Plan and Sections of Shoal.*

This plan represents a navigable channel, which it is proposed to dredge through this shoal, in order to shorten the sailing-course, and avoid the circuitous route by the River. Pl. 67.

An ancient road or causeway has been traced across this shoal, and it is anticipated that upon its removal a great portion of the current of the River will run in this course, and with the aid of a little dredging the stream will remove the soft mud, and alluvial deposits of which this shoal is composed, and which it is surmised the construction of the road alluded to has in a great measure tended to accumulate.

The sections show the required sinking.

For details of borings, see the Registry, page 94.—Estimate, £249 12*s.* 6*d.*

Pl. No. 68.—*Grose's Islands—Plan and Sections of Shoals.*

The extent of the shoals (which are composed of strong gravel) is defined on the plan in the manner before described. Pl. 68.

The deepest channel at present is close to the south side of the islands, but for the purposes of steam navigation it is proposed to form the channel in the direction shown on the plan by the dotted line edged with red, removing altogether the lower island, and raising with the spoil the upper island, which, when planted with trees, will serve as a beacon.

The height of the shoals, and the materials of which they are composed, are represented on the sections, on which is also delineated the depth of the proposed excavation, namely, 3 feet 6 inches below the datum level, (the Upper Sill of Jamestown Lock.)

For details of borings, see Registry, page 94.—Estimate, £569 8*s.* 2*d.*

Pls. Nos. 69 and 70.—*Carrick-on-Shannon—Plans and Sections showing the present state of the Navigation, and the proposed Improvements.*

Pl. 69 contains two plans. Upon plan No. 1, is represented a great portion of the town of Carrick-on-Shannon, together with the bridge and harbour in their present state, and the extent of the shoal at the bridge, which is distinguished from the deep parts of the river in the usual manner. Pl. 69.

Upon this plan are also represented the general soundings of the River below the proposed reduced level, and the sites of the several borings which have been made.

Plan No. 2 shows at a large scale (66 feet to an inch) the works proposed to be executed for the improvement of the navigation and harbour.

These consist of a swivel-bridge, its pier and abutment, with land-arch; these are proposed to be erected in place of three of the present arches (on the Leitrim or town side of the bridge) to be removed.

An alteration in the approach to the bridge by the removal of three small cabins adjacent thereto; a quay or retaining wall about 270 feet in length below the present bridge, and above it (in the direction indicated on the plan) to the harbour.

An extension of the present harbour may be made by degrees, as the trade increases, according to the design here shown, which will afford the means of easy access for either steam vessels or trade boats coming up or down the River.

A wooden jetty near the mouth of the harbour for the use of steam vessels, and an ample wharf and road-way round the proposed quay-wall, harbour, and jetty.

Pl. No. 70.—On this plate is represented longitudinal sections through the centre of the River course, and of the proposed navigable channel, together with transverse sections of the River course and present harbour, showing the required excavation. Pl. 70.

Upon this Drawing is also represented an elevation of the present bridge, showing the required deepening through the arches, for the purpose of facilitating the discharge of the

Details of Plans. floods; and a design for the proposed swivel-bridge, for the masonry of which abundance of excellent materials can be had in the immediate neighbourhood.

For the details of the borings, the sites of which are marked on Pl. No. 69, see the Registry of Borings, page 94.—Estimate, £8,425 10*s.* 0*d.*

Pl. 71.—*Hartley—Plan and Sections of Shoal.*

Pl. 71. This shoal is of very small extent, as shown upon the plan and longitudinal section, and is formed of strong gravel, which it is proposed to excavate to the extent shown upon the plan and sections, the level of the bottom of the excavation being 3 feet below the datum, by which means there will be obtained a depth of 6 feet 6 inches water at the lowest state of the River. For details of borings, see Registry, page 96.—Estimate, £48 13*s.* 0*d.*

Pl. 72.—*Port—Plan and Sections of Shoal.*

Pl. 72. Upon the plan is represented the River course, and the side cut or canal by which the navigation is at present carried on. The extent of the shoal is clearly defined upon the plan in the usual manner, as is also the ruins of an old eel-weir, stretching across the whole River course, and which at present obstructs the passage of the waters.

The shoal is formed by a ledge of rock which here crosses the River, and which has caused an accumulation of gravel, as is more particularly represented on the longitudinal and transverse sections.

It is proposed to abandon the side-cut, and form a channel, both for the purposes of navigation, and the free discharge of the floods through the River course, as represented on the plan by the dotted lines edged with red; to remove the old eel-weir, and sink the proposed channel to the depth of three feet below the datum level, as represented on the section.

The removal of this shoal will considerably facilitate the discharge of the floods from the narrow and circuitous parts of the River, between it and Battle Bridge.

For the details of the borings, the sites of which are represented on this plan, see Registry of Borings, page 96.—Estimate, £630 15*s.* 2*d.*

Pls. Nos. 73 and 74.—*Leitrim—Plan and Section of Shoals, showing the proposed Improvements, and the terminus of the Steam Navigation.*

Pl. 73. This is a plan of the greater portion of the River between Port and Battle Bridge; the several shoals in the River course are distinguished on the plan in the usual manner. The general soundings of the River, and the sites of the several borings which have been made at this place, are also marked upon the plan.

There are three shoals in this part of the River; that near Leitrim is chiefly composed of limestone rock, to avoid which, as much as is consistent with obtaining a proper channel for the steam navigation, it is proposed to cut off a small portion of the Roscommon bank of the River, as represented on the plan. The other two shoals are composed of hard close gravel upon rock.

Owing to the circuitous course of the River, and its want of breadth near the proposed lock at Battle Bridge, at the southern extremity of the Lough Allen Canal, it is not proposed that the steam tug-vessels shall proceed further up stream than the point where the boundary between the townlands of Drumheirney and Leitrim meets the River, at which place it is proposed to form a landing-quay, and by making a short side-cut through the lands at Leitrim, obtain a tolerably straight course thereto for steam vessels. Sufficient space and depth of water can be had at this point for warping round even a large class steam-vessel, and by means of the proposed cut, the advantages of a double approach will be obtained.

This proposed terminus of the steam navigation below Lough Allen, is about 130 miles from Limerick, and 115 from Killaloe, the southern terminus of the inland steam navigation of the Shannon.

The proposed improvements above described, are represented on the plan, together with the proposed channel through the shoals above this point, and the proposed towing-path to Battle Bridge Lock.

Upon this plan is also represented, the alteration recommended to be made in the line of road from Leitrim to Battle Bridge.

Pl. 74. Upon plate 74 is represented longitudinal sections through the centre of the River course, and of the proposed side-cut, together with several transverse sections of the shoals in the River, showing the materials of which they are composed, and the depth and extent of the excavation proposed to be made for the purpose of improving the navigation and drainage.

For details of the borings represented upon the above plan and sections, see the Registry of Borings, page 98.—Estimate, £3,100 0*s.* 6*d.*

Pls. No. 75 and 76.—*Battle Bridge—Plan and Sections of the present and proposed Locks, together with an Elevation of the present Bridge.*

Pl. 75. Pl. 75 represents a plan of the present lock and bridge, both of which are proposed to be removed.

The lower sill of the present lock is 2 feet 11 inches too high to afford 6 feet water over it at the proposed reduced level; and as it is also shorter than the locks on the Royal Canal, the scale of which navigation it is here intended to adopt, the present lock must be removed, and two single locks with an intervening basin constructed in its stead, on the site shown on the plan, and having a total rise of 13 feet 3 inches, as part of which design it

will be necessary to raise the water surface in the Canal, between the locks at Battle Bridge and Drumleague, 1 foot 2 inches above its present level. Details of Plans.

As the present bridge over the River is in a ruinous state, and the bridge over the Canal does not afford sufficient head-room even at the present height of the water-surface in the Canal, it is recommended that the bridge proposed to be built by the adjoining Counties, should be built in or near to the site represented on the plan; and the Canal-bridge can then be constructed with sufficient head-room, (and yet without injury to the levels of the proposed road) over the tail of the lower lock, as shown upon the plan and section. Pl. 75.

Upon this plan is also represented a longitudinal section through the present lock, and through the sites of the proposed locks, together with transverse sections of the River and Canal, showing the required excavation and embankments, the heights of the present and proposed lock-sills, and the nature of the ground through which the sections have been taken, as far as it has been ascertained by the borings.

Pl. 76 represents a longitudinal section of the River course, and transverse sections of the River and Canal, together with the elevation of the present bridge. Pl. 76.

Upon these sections are represented the heights of the summer-water and winter-floods of this part of the Shannon, the materials of which the shoal at the bridge is composed, and the excavation proposed to be made in the bed of the River in order to give free vent to the floods.

For the details of the borings, the sites of which are marked upon the plan and sections, see Registry of Borings, page 105. Estimate, £5,581 1*s.* 8*d.*

Pls. Nos. 77, 78, 79 and 80.—*The Lough Allen Canal from Battle Bridge to Lough Allen.*

Pls. 77, 78, and 79.—Detailed plans of the above Canal, at a scale of 200 feet to an inch, showing the extent of the property belonging to this navigation, the boundaries of which are distinguished upon the plans by a line edged with a yellow tint. Pl. 77.

Upon Pl. 78 are represented two transverse sections of that portion of the Canal between Drumleague Lock and Lough Acres; and upon Pl. 79, the plan and transverse section of the proposed towing path along Lough Acres. Pl. 78, 79.

Pl. 80 represents several transverse sections of the Canal, both in the deep rock-cutting between Lough Acres and Lough Allen, and in the lower level of the Canal, between Drumleague Lock and Battle Bridge, together with an elevation of Drumhauver Bridge. Pl. 80.

Upon this latter level, as has been already stated, (Pls. 75 and 76,) it is proposed to raise the water-surface 1 foot 2 inches above the level of the present water in the Canal, and consequently the embankments must be raised also. In order to enlarge this Canal, however, to the same scale as the Royal Canal, it would be necessary to widen it and increase the banks as shown by the red dotted lines upon the sections on Pl. 80, where the Canal is represented in embankment; but as to accomplish this object it would become necessary to purchase more ground, it is conceived sufficient for the present state of the trade of this Canal, to raise the banks of those portions according to the design shown on said sections which is distinguished by the continuous line edged with a red tint.

Drumleague Lock, represented on Pls. 77 and 78, (being shorter than the locks on the Royal Canal, the scale of which navigation, as before mentioned, it is intended to adopt,) is proposed to be lengthened, by taking down the upper sill and part of the chamber-walls adjacent, and adding thereto, without disturbing the lower sill, or body of the chamber. It is proposed to lay the upper sill a foot lower than the present sill, so as to afford 6 feet water upon it at the reduced level of water-surface, which is the low summer-water of Lough Allen, namely, 5 feet upon the present upper sill. From Drumleague Lock to Lough Allen, the Canal will require to be deepened, and in some places widened, as shown upon the sections in Pls. 78 and 80, and upon the longitudinal section thereof in Pl. 11; along the greater portion of this Canal the towing path requires to be formed and gravelled, and an embankment made along Lough Acres, on the site shown on Pl. 79, from the spoil-banks of the deep cutting adjacent thereto.—Estimate, £4,235 0*s.* 0*d.*

Pl. 81.—*Drumshanbo—Plan and Sections of the proposed Harbour at the head of the Lough Allen Canal.*

The plan represents the site of the proposed harbour, which is selected as the most suitable to serve the general trade of Lough Allen, as also that of the town of Drumshanbo, which is a fast improving market town, and only half a mile distant from the proposed harbour. Pl. 81.

The harbour is proposed to be formed by removing part of the present canal-bank on the eastern side, (at its junction with Lough Allen,) and excavating a portion of the low meadow land adjoining it, and by constructing two piers in the direction shown on the plan, with a portion of the rock which forms the spoil-banks of the Lough Allen Canal, at the adjacent deep sinking.

The harbour, and a channel from its entrance to the deep water in the lake, are proposed to be excavated to the depth of 1 foot 6 inches below the present upper sill of Drumleague Lock, as represented upon the transverse section, and the wharf to be raised with the spoil, to the level shown thereon.

An eligible site for stores is also shown upon the plan and sections, having the advantage of an immediate communication, both with the public road, and, at the same time, with the trade boats in the harbour.

For details of the borings, the sites of which are represented on this Drawing, see Registry of Borings, page 109.—Estimate, £2,292 3*s.* 0*d.*

DETAILS OF PLANS.

Pls. Nos. 82 and 83.—*Bealantra Bridge—Plan and Sections of the River Course, showing the proposed Regulating Weir.*

Pl. 82. Upon Pl. 82 is represented the plan of this portion of the River Shannon, at the point where it flows out of Lough Allen.

The River course is choked up with numerous small islands, eel-weirs, and the alluvial deposits carried down by the Arigna River.

Upon the plan is represented the regulating weir proposed to be constructed to keep up the summer level of the water in Lough Allen, and in the Lough Allen Canal, as far as Drumleague Lock, and, at the same time, to give free discharge to the floods; for the full accomplishment of which object, it will be necessary to widen the River course to the breadth shown upon the plan by the red lines. The height of the proposed weir is to be 5 feet above the level of the upper sill of Drumleague Lock, which is 20 feet 9 inches above the datum level or upper sill of Jamestown Lock.

Pl. 83. Upon Pl. 83 is represented an elevation of the present Bridge of Bealantra, now in a ruinous condition, and of little or no use, as a new line of road has been made within these few years, about half a mile lower down the River, in place of that which passes over this bridge. Several transverse sections of the River are also shown upon this plate, distinguishing by a red tint, the extent of the proposed excavation.

For the details of the borings, the sites of which are shown upon this plan, see Registry thereof, page 107.—Estimate, £2,892 2*s.* 4*d.*

Pl. 84.—*Arigna River—Plan and Sections of the Cut at Mount Allen.*

Pl. 84. The plan represents an old cut which it is proposed to enlarge, and connect with the Arigna River so as to alter the course of the latter, and afford the means of discharging its waters in a direct course to Lough Allen, and thereby prevent the sudden floods and consequent loss of agricultural produce which this River causes in that portion of the Shannon between Lough Allen and Jamestown.

The longitudinal and transverse sections represent the nature of the soil to be excavated, chiefly peat and blue clay, and the extent of the proposed excavation is represented thereon by a red tint.

An embankment is proposed to be formed across the present course of the River, on the site shown upon the plan, in order to prevent the water flowing in the old course, and to turn it into the proposed channel.

For details of the borings, the sites of which are marked on the plan, see Registry of Borings, page 108.—Estimate, £1,215 15*s.* 0*d.*

THE CARNADOE WATERS.

Pl. No. 85.—*General Plan of the Carnadoe Waters, County Roscommon.*

Carnadoe Waters.
Pl. 85. This plan embraces three large divisions of water, viz.:—Carnadoe, Grange Lough, and Gillstown Lough, comprising about 25 miles of shore. The shoals requiring to be dredged are shown by a red tint; the present courses are shown by dotted lines, and the soundings are marked in feet and inches. The improvement at present proposed upon these waters, is to throw them open by removing the shoal at Carnadoe Bridge, and also to make a navigable cut from the Carnadoe Lough, through the low lands at Carrageen, into Gillstown Lough; these improvements extend a distance of three miles above Carnadoe Bridge, and are described by a red tint upon the plan.

Pl. No. 86.—*Sections of the Carnadoe Waters.* (*See. Pl. No.* 85.)

Pl. 86. Figure 1, describes the section of the course from Carnadoe Bridge through the Crooked River opposite to Carrageen, and along the Gillstown River up to Gillstown Bridge.

Figure 2.—Section of Grange Lough taken from a point in the last section, 2¼ miles above Carnadoe Bridge, and in the direction of Grange Bridge.

Figure 3, is the section of Killglass Lough. This begins at a point in No. 1 section, three miles above Carnadoe Bridge, and continues to the head of Killglass Lough.

Pl. No. 87.—*Carnadoe Bridge—Plan and Section of Shoal,*

Pl. 87. Shows the sectional deepening required to form a convenient harbour, the proposed quays, and the swivel-bridge, by which it is intended to open the whole of the Carnadoe Waters to a free communication with the River Shannon. See Registry of Borings, page 84.—Estimate, £8,803 1*s.* 2*d.*

Pl. No. 88.—*Plan of proposed Cut between Carnadoe and Killglass Loughs,*

Pl. 88. Showing the proposed cut by which the navigation will be opened up to Killglass and Gillstown, and the drainage greatly improved.

Pl. No. 89.—*Sections of proposed Cut and River at Carrageen.* (*See Pl.* 85.)

Pl. 89. These sections show the dimensions of the proposed navigable cut, and the required deepening is marked by the red tint. See Registry of Borings, page 83.—Estimate, £4,914 11*s.* 9*d.*

THE BOYLE WATER.

Pl. No. 90.—*Plan of the Boyle Water.*

The Boyle Water.
Pl. 90. This general plan has been reduced from the Ordnance Survey, and represents the Boyle Water from the Boat-house Ford, which is within 1½ miles of the improving town

of Boyle, to its junction with the Shannon, north of Carrick-on-Shannon, a distance of 9½ miles, together with Lough Key, and the other lakes through which it spreads itself in its course, having for this distance a line of coast of 26 miles. **Details of Plans.**

Boyle Water.

The sites of the several works, proposed to be executed in order to open up the navigation of these waters for steam vessels, are represented upon this plan, and the numbers of the plates in which the detailed designs of the several works are represented, are noted thereon.

The general extent of the flooded lands is also shown, together with the line of the general section (described in the following plate), represented by a dotted line through the centre of the River and proposed sailing course.

Pl. No. 91.—*General Section of the Boyle Water,*

Showing the features of the bed of the River and Lakes, and the materials of which it is composed, ascertained in the same manner as those of the Shannon, (see description of Pls. Nos. 9, 10, and 11,) together with the heights of the floods and low summer-water, and the general extent of the proposed excavation. Pl. 91.

The Datum Level, with reference to which the heights are figured, is the *Upper Sill of Jamestown Lock*, which, as already mentioned, is the datum level for all the sections of the Boyle Water.

For the purpose of improving the navigation and drainage of the Boyle Water, it is proposed to lower the shoals which exist in the proposed sailing course, between the Shannon and the site of the proposed lock above Knockvicar Bridge, to the level of 3 feet below the datum, as shown upon this section, and to keep up to this point the same level of water-surface as that proposed for the Carrick-on-Shannon reach of the River Shannon; to overcome the fall at Knockvicar, by a lock of 4 feet rise, and to erect, on the site shown on the plan, a regulating weir, the top of which is to be placed 7 feet 6 inches above the datum level.

Pl. No. 92.—*Diagram Section, showing the Level of low Summer-Water, Winter-Floods, highest points of the Shoals, proposed reduced Water-Surface, Lock, and Regulating Weir.*

This section has been prepared at the same scale of height, and for similar purposes as that delineated on Pl. No. 15. For description of which, see page 4. Pl. 92.

The effect of the floods in the Shannon in backing up the waters of this river and lake, is clearly perceptible upon an inspection of this section.

Pl. No. 93.—*Tumna—Plan and Sections of Shoal.*

The plan represents the extent of the shoal, which is distinguished from the deep parts of the River in the manner already described. Pl. 93.

The shoal is composed of gravel and stones, and is situated near the junction of the Boyle Water with the Shannon.

The channel proposed to be cut (150 feet wide) through this shoal, is represented on the plan by the red dotted lines, and the sites of the beacons proposed to be erected to define the sailing course through the shoal, and of the buoys to show the deep water at the junction with the Shannon, are also marked thereon, together with the general soundings, and the sites of the several borings which have been made in this shoal.

The heights of the shoal, summer-water, winter-floods, and reduced level of water-surface, are shown upon the longitudinal and transverse sections, together with the extent of the excavation, which is distinguished thereon by a red tint.

Owing to the exposed situation in which this shoal is placed, it is proposed to excavate the channel to the depth of 3 feet 6 inches below the datum level, instead of 3 feet, as recommended for most of the other shoals on this part of the navigation.

For details of the borings, see Registry thereof, page 112.—Estimate, £639 9*s.* 6*d.*

Pl. No. 94.—*Annalecky and the Doctor's Weir—Plan and Sections of Shoal.*

The plan represents the form and extent of the three shoals which here obstruct the navigation and the free discharge of the waters. Pl. 94.

The first of these, at the point of Davis's Island, is a narrow ridge of gravel and clay; the middle shoal, called "Annalecky or the Flag-ford," is formed chiefly of a ledge of rock across the river-course, dipping towards the southern side, as shown on the section.

The upper shoal, called the Doctor's Weir, is also formed by a ledge of rock, (covered with gravel and stones), the general surface of which however is not so high as that of Annalecky.

Upon the plan are also represented the general soundings of the river, and the sites of the several borings which have been made.

The proposed channel (100 feet wide) through these shoals, is shown by a red dotted line on the plan, and the depth, breadth, and slopes of the proposed excavation shown upon the sections, together with the proposed spoil-banks, also the present heights of the water-surface, and its proposed reduced level.

For details of borings, see Registry, page 113.—Estimate, £2,274 3*s.* 0*d.*

Pl. No. 95.—*Cloonacarrow—Plan and Sections of the proposed alteration in the Sailing Course.*

This represents a portion of the River where the turn is too sudden for the advantageous use of steam vessels, and in consequence, it is proposed to make it more gradual, by cutting off a portion of the low callow-meadow-land of Cloonacarrow in the direction delineated on the plan, and to the depth shown upon the longitudinal and transverse sections. Pl. 95.

For details of borings, see Registry, page 118.—Estimate, £339 18*s.* 0*d.*

DETAILS OF PLANS.

Boyle Water.

Pl. 96.

Pl. No. 96.—*Cootehall—Plan and Sections of Shoal, showing the present and proposed Bridges.*

The plan shows the extent of the shoal from the deep water below the bridge to the deep water in Oakport Lough above the bridge.

This shoal is chiefly composed of limestone rock, which, as is shown upon the transverse sections, forms the shore of the River on the Cootehall side, and dips considerably towards the Culmore shore, where, however, the rock is found to rise again, as shown upon the section below the present bridge.

The proposed navigable channel is shown upon the plan by red dotted lines, and is to be formed as close to the Culmore side as possible, in order to avoid the rock-cutting.

The present bridge is proposed to be removed, and another erected lower down the stream, in the site shown upon the plan, consisting of 2 stone arches, and a cast iron swivel bridge in the centre, as shown in the drawing. This bridge will afford ample waterway for the discharge of the floods, and the land-approaches to it will be much better than those to the present bridge.

The spoil, from the excavations, may be deposited in the sites shown upon the plan and sections, and faced with stones, and a quay-wall of a sufficient length to suit the trade of the place may be erected on the Culmore side.

The sections show the height of the shoal, of low summer-water and winter-floods, and the extent of the proposed excavation, the bottom of which is to be 3 feet below the datum level.

For details of the borings, see Registry, page 118.—Estimate, £6,858 4*s.* 0*d.*

Pl. No. 97.—*Oxhill Island—Plan and Sections of Shoal.*

Pl. 97.

The plan represents the extent of the shoal, which is chiefly formed by a ledge of limestone rock stretching across the river, but dipping from the Knockadaff shore towards the Oakport shore, as shown upon the transverse sections in the lines E F, and G H.

Taking advantage of this circumstance, the proposed navigable channel has been laid out on the Oakport side of the island, as shown upon the plan, upon which it is represented by red dotted lines; by which means also the straightest direction for the proposed channel is obtained.

The longitudinal and transverse sections, show the materials of which the shoal is composed, as ascertained by the borings, and the extent of the required excavation which is distinguished thereon by a red tint. For details of the borings, see Registry, page 122.—Estimate, £761 8*s.* 2*d.*

Pls. Nos. 98, 99, and 100.—*Knockvicar—Plan and Sections of Shoal, showing proposed Bridge, Lock, and Regulating Weir.*

Pl. 98.

Upon Pl. 98 is represented the plan of this shoal, which is of considerable extent, and formed chiefly of limestone rock; upon the plan is also shown the site of the present bridge, with the eel-weirs and old mill-works immediately above it; also the eel-weirs and dam at the upper part of the shoal, midway between the bridge and Lough Key, which materially impede the discharge of the waters of that Lough, and flood the adjacent low lands.

The River, as it flows out of Lough Key, winds through a narrow valley for some distance, but still affording ample breadth for carrying into effect the scale of navigation designed for the rest of this tributary, namely, that which would suit steam vessels adapted to the alternate lake and river navigation of the Upper Shannon, and from which scale it would not be desirable to depart in a tributary of so much importance as the Boyle Water and its lakes.

To overcome the fall at this shoal, it is proposed to erect a lock on the scale referred to, on the site represented on the plan, with a regulating weir of about 300 feet in length.

The channel above the lock to be excavated to the depth shown on the transverse sections on Pls. Nos. 98 and 100, and (in consequence of the winding course) to a breadth of 100 feet as shown on the plan.

Below the lock the channel is proposed to be formed in the direction shown on the plan, across the low flat island opposite Mr. Peyton's house; and thence by the present River course, (100 feet wide,) to the deep water at the south-eastern extremity of the shoal.

Pl. 99.

The present old bridge, being ill constructed, and unsuited to the proposed navigation, (see its elevation Pl. 99,) is proposed to be removed, and a cast-iron swivel-bridge, with two side stone-arches (similar to that designed for Cootehall, see Pl. No. 96,) erected below the present bridge, on the site shown upon the plan, where a solid rock foundation can be had.—See section in the line U V., Pl. 99.

Upon Pl. 98 is also represented a longitudinal section through the centre of the proposed sailing course, showing the materials of which the shoal is composed, the depth of the required excavation, together with a section through the centre of the proposed lock; also the heights of low summer-water and winter-floods, and the proposed reduced level of the water-surface below the lock, which is the same as that proposed for the reach of the Shannon between Jamestown and Battle Bridge, by which means there will be an uninterrupted navigation for 13½ miles from Jamestown to this lock.

Pl. 100.

Upon Pl. No. 100 are represented several transverse sections of the River course and mill-race, showing the extent of the required excavations, together with a transverse section through the chamber of the proposed lock in the line K L, and a transverse section of the proposed regulating weir in the line I J, on Pl. No. 98.

For the details of the several borings which have been made in this shoal, and the sites of which are delineated on the plans and sections above referred to, see Registry of Borings, page 124.—Estimate, £15,184 15*s.* 2*d.* DETAILS OF PLANS. Boyle Water.

Pls. Nos. 101 and 102.—*Boyle River—Plan and Sections of the proposed Improvements, and proposed terminus of the Sailing-Course.*

The plan (Pl. No. 101) represents the navigable portion of the Boyle River, above Lough Key, and the site proposed for the Harbour at the terminus of the steam navigation, immediately below the Boat-house Ford, within 1½ miles of the town of Boyle. Pl. 101.

The River course from Lough Key to this point is, with but few exceptions, very deep, as shown by the sections, and the soundings on the plan. It is proposed to widen and straighten it in the direction indicated on the plan by the red lines. The materials of which the banks and bed of the river are composed being chiefly a soft peaty or alluvial clay, the work will be easy of execution.

The Harbour is proposed to be formed as shown upon the plan, of a sufficient size to admit of turning or warping round the steamer or other vessels used in the navigation.

The Quay is proposed to be formed of piles, backed with flags and concrete.

From the site of the proposed Quay to the mail-coach road between Boyle and Sligo, it is recommended that a road should be formed, which would be more direct to Boyle, and of more easy inclinations than the present road from the Boat-house Ford by the Abbey.

Upon Pl. 102 are shown several transverse sections of the river-course, showing the extent of the required excavation, the heights of the summer-water, winter-floods, and the proposed permanent level of water-surface in Lough Key. Pl. 102.

For details of the borings, see Registry of Borings, page 134.—Estimate, £3,207 2*s.* 8*d.*

Pl. No. 103.—*Section across the lowest part of the summit of the Country, between Lough Key and Lough Arrow.*

Upon this Pl. is represented a section (furnished to the Commissioners by the Ordnance Department) across the lowest part of the summit between Lough Key and Lough Arrow. The water from Lough Key flows by the Shannon to the sea at Limerick, whilst the water of Lough Arrow flows by the River Arrow to the sea at Ballisodare, near Sligo. Pl. 103.

As the connection between these lakes by a Canal has been frequently spoken of, and may, at some future period become desirable, this drawing has been included in the number of Pls. accompanying this Report, as furnishing useful information on the subject.

RIVER FERGUS.

Pl. No. 104.—*Survey of the River Fergus, from Clare to Ennis.*

Survey of the River Fergus from the site of the proposed wharf below the town of Clare to the town of Ennis. The parts coloured red, show the line of the Canal to be cut at Clare, to avoid the rocky shoals above the bridge; and the part coloured red at Lifford, near Ennis, is the site for the construction of a wharf; the red line along the right bank of the River represents the towing path, which will require to be formed. On this plan will be seen parts of the towns of Clare and Ennis. The large numerals refer to the sections, and the smaller figures denote the depth of water in the centre of the River, at the points where the sections were taken, when the water shall be retained at the depth of 14 feet on the dock sill at Clare. River Fergus. Pl. 104.

Pl. No. 105.—*Enlarged Plan of part of the River Fergus at Clare,*

Showing the line of the proposed Canal, with a lock, by which sailing vessels will be enabled to pass into the River, above the bridge, and rocky shoals which obstruct the navigation of the River. As the high road from Ennis to Limerick will cross the Canal, a swivel-bridge will require to be erected, as shown on the plan. The site of the proposed regulating weir, above the bridge, is tinted red; a section of the weir is also shown. Pl. 105.

Pl. No. 106.—*Plan and Sections of that part of the Canal at Clare, where it is proposed to lay down a Swivel-Bridge.* (*See Pl.* 104.)

Figure 1.—Ground plan of the opening across which the bridge will be formed, distance between the retaining walls 40 feet; the position for the lower rings of the platform is marked, and the road-way of the bridge is shown by dotted lines, breadth 15 feet—10 feet carriage-way, two foot-paths 2 feet 6 inches each. Pl. 106.

Figure 2.—Section on the line A B, showing the retaining walls of that part of the Canal under the bridge forming the abutments for the same, and also the foundations for the traversing platforms.

Figure 3.—Section of the retaining wall below the bridge, where it is proposed to erect a strong mooring post.

Figure 4.—Transverse section of the road on approaching the bridge, with the retaining walls on each side.

Pl. No. 107.—*Plan and Elevation of the Bridge at Clare.*—(*Having reference to Pl.* 104.)

Figure 1.—Elevation of the bridge at Clare, as also that of the swivel-bridge as proposed to be erected across the Canal. Pl. 107.

Figure 2.—Plan of the road-way of the present bridge, and of the proposed swivel-bridge across the Canal.

Details of Plans.

River Fergus.

Pl. 108.

Pl. No. 108.—*Longitudinal Sections of the River Fergus, on the line of the proposed Canal at Clare.*—(*See Pl.* 104.)

Figure 1.—Longitudinal section in the centre of the River Fergus at Clare, on a line drawn from No. 1. to No. 18. Plan 2.

Figure 2.—Longitudinal section of the line of the proposed Canal at Clare.

Pls. 109, 110.

Pls. Nos. 109, 110.—*Transverse Sections of the River Fergus.* (*See Pl.* 104.)

Pl. 111.

Pl. No. 111.—*Plan and Sections relating to the proposed Wharf at Lifford, near Ennis.*

Figure 1.—Plan showing the site for the proposed wharf at Lifford, below the bridge at Ennis, 300 feet frontage to the river; as also the road to communicate with it from the high road from Ennis to Gort, adjoining Clonrood Bridge.

Figure 2.—Longitudinal section of the road-way passing over Clonrood Bridge, on the line A B, Figure 1.

Figure 3.—Longitudinal section of the ground from the front of the proposed wharf to the Clonrood Bridge, C D, Figure 1.

Pl. 112.

Pl. No. 112.—*Plan, Section, and Elevation of the proposed Wharf at Lifford.* (*See Pl.* 104.)

Figure 1.—Elevation of the proposed wharf when finished.

Figure 2.—Plan of the proposed wharf, showing the foundations of the same.

Figure 3.—Transverse section of the wharf when finished, showing the retaining wall; the parts of the River coloured red indicate the portions of ground to be removed, and the parts coloured red in rear of the retaining wall, where filling will be necessary, to bring the surface to a level. Estimate for the Fergus, £26,352 0*s.* 0*d.*

River Scarriff.

Pls. Nos. 113 and 114.—*Survey of the Scarriff River, and Sections of same.*

River Scarriff.

Pl. 113.

The plan represents that portion of the Scarriff river extending from the town of Scarriff, (and passing at Reddin's-quay near that of Tuomgraney) to Lough Derg. From Reddin's-quay, the distance to Lough Derg is a mile and a half.

The River is at present navigable during those portions of the year, when the water is nearly as high as the banks, for barges of 50 tons burden; but in summer, owing to a rocky shoal extending about half a mile below Reddin's-quay, together with a few shoals of mud and gravel lower down the River, and the bar at its mouth, (composed chiefly of marl,) the navigation is impracticable; as also in winter, during the high floods, at which time the banks being covered with water, the course of the River cannot be discerned.

As the towns referred to have a great tract of rich agricultural land in their neighbourhood, including the valley of the Feacle, and as the design for regulating the height of the water in Lough Derg embraces the lowering of the waters to the summer level, it is proposed to cut away the shoals in this portion of the River to the level of 6 inches below the upper sill of Killaloe Lock, to straighten and improve the River course, and to construct a harbour, (suitable to the present wants of the towns of Tuomgraney and Scarriff,) at Reddin's-quay, from which a short road may be formed to connect the harbour with these towns; and also to erect two beacons at the mouth of the river to mark its entrance.

Upon Pl. 114 is represented longitudinal sections of the River from Hogan's Island, near Scarriff, to Lough Derg, together with several transverse sections, showing generally the materials of which the shoals and bed of the River are composed, the heights of the low summer-water, winter-floods, and proposed reduced level of water-surface, together with the depth and extent of the proposed excavation.—Estimate, £4,133 11*s.* 6*d.*

Bascule Bridge.

Pls. Nos. 115, 116, 117, 118, 119, 120, and 121.—*Elevations, Sections, and Details of Construction for a Bascule or Lift Bridge, applicable to the Works on the Upper Shannon.*

Bascule Bridge.

This description of bridge is applicable to either a stone or a wooden bridge, and can be fixed between abutments or piers of masonry, or in an opening of a timber bridge, or between two abutments of a wide water-way, by supporting the Bascule Bridge upon piles, so as to retain a wide water-way without the necessity of a large span for the opening part of the bridge, and which are from a bridge already constructed in the original opening of a fixed bridge over the River Wensum, at Norwich, the arch only being removed, and the iron Bascule Bridge substituted in its place, without disturbing the abutments of the bridge.

The clear opening of the bridges shown in the drawings is 30 feet, and the width of road-way between the railings 12 feet.

The opening road-way of the bridge is formed by two leaves or platforms, formed of cast-iron ribs, covered with planking, which are balanced by counter weights, on the tails or inner end of the ribs which move in recesses provided in the stone abutments, or fall down in the side openings if the bridge be constructed of wood.

The dimensions of all the parts are figured on the drawings.

The movement of the leaves is effected by means of wheels and pinions, and the bridge can be opened or closed by a winch at each side, which, from the leaves being accurately balanced, can be worked with a very small force, even by a woman or a boy, in the space of one minute.

The cost of iron-work, machinery, fixing and planking one of the above bridges, exclusive of foundations and supports, will be about £600; more or less, according as the road-way may be increased or diminished in width.

APPENDIX.

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Appendix A. No. 1.

Heights of Water between Cloondrah and Rooskey Locks.

APPENDIX A, No. 1.

TABLE showing the NUMBER of DAYS in each MONTH of the following YEARS, on which the WATERS of the RIVER SHANNON, between CLOONDRAH and ROOSKEY LOCKS, were *at and above* the several HEIGHTS mentioned in the TABLE.

CLOONDRAH LOCK.—UPPER SILL.
The present Upper Sill is on the same level with the proposed Sill.

Description of the Heights.	Height of Water on Upper Sill.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total No. of Days.
Year 1836.	Ft. In.													
Lowest Summer Water, -	5 8	No Registry for this Month.	29	31	30	31	30	31	31	30	31	30	31	335
Height assumed as that of 6 Months' Flood, -	8 9		29	31	21	-	-	-	-	-	23	21	31	156
Height assumed as that of 3 Months' Flood, -	9 3		20	23	12	-	-	-	-	-	-	11	31	97
Ordinary High Floods, -	10 8		5	-	-	-	-	-	-	-	-	-	11	16
Height assumed for very High Floods, - -	12 0		-	-	-	-	-	-	-	-	-	-	-	-
Year 1837.	Ft. In.													
Lowest Summer Water, -	5 8	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	8 9	19	17	15	-	-	-	-	-	12	-	26	31	120
Height assumed as that of 3 Months' Flood, -	9 3	7	15	5	-	-	-	-	-	-	-	8	13	48
Ordinary High Floods, -	10 8	-	-	-	-	-	-	-	-	-	-	-	-	-
Height assumed for very High Floods, - -	12 0	-	-	-	-	-	-	-	-	-	-	-	-	-
Year 1838.	Ft. In.													
Lowest Summer Water, -	5 8	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	8 9	15	16	30	11	-	-	-	-	-	-	16	20	108
Height assumed as that of 3 Months' Flood, -	9 3	1	-	14	-	-	-	-	-	-	-	9	11	35
Ordinary High Floods, -	10 8	-	-	-	-	-	-	-	-	-	-	-	-	-
Height assumed for very High Floods, - -	12 0	-	-	-	-	-	-	-	-	-	-	-	-	-

ROOSKEY LOCK.—LOWER SILL.
The present Lower Sill is 2 feet 2 inches above the level of the proposed Sill.

Description of the Heights.	Height of Water on Lower Sill, corresponding with that on Cloondrah Up. Sill.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total No. of Days.
Year 1836.	Ft. In.													
Lowest Summer Water, -	3 6	No Registry for this Month.	29	31	30	31	30	31	31	30	31	30	31	335
Height assumed as that of 6 Months' Flood, -	6 7		29	30	30	4	-	-	10	24	31	30	31	219
Height assumed as that of 3 Months' Flood, -	7 1		25	24	24	-	-	-	-	7	30	30	31	171
Ordinary High Floods, -	8 6		1	2	-	-	-	·	-	-	-	14	26	43
Height assumed for very High Floods, - -	9 10		-	-	-	-	-	-	-	-	-	-	5	5
Year 1837.														
Lowest Summer Water, -	3 6	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	6 7	31	28	23	-	6	-	-	-	13	7	30	31	169
Height assumed as that of 3 Months' Flood, -	7 1	31	20	15	-	-	-	-	-	5	-	28	31	130
Ordinary High Floods, -	8 6	-	11	2	-	-	-	-	-	-	-	2	-	15
Height assumed for very High Floods. - -	9 10	-	-	-	-	-	-	-	-	-	-	-	-	-
Year 1838.	Ft. In.													
Lowest Summer Water, -	3 6	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	6 7	31	28	31	30	4	-	-	13	15	4	30	31	217
Height assumed as that of 3 Months' Flood, -	7 1	31	28	31	24	-	-	-	3	-	-	29	31	177
Ordinary High Floods, -	8 6	-	-	-	-	-	-	-	-	-	-	-	-	-
Height assumed for very High Floods, - -	9 10	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix A.
No. 1.

Height of Water at Rooskey and Jamestown Locks.

TABLE showing the Number of DAYS in each MONTH of the following YEARS, on which the WATERS of the RIVER SHANNON, between ROOSKEY and JAMESTOWN LOCKS, were *at and above* the several HEIGHTS mentioned in the Table.

ROOSKEY LOCK.—UPPER SILL.
The present Upper Sill is 1 foot 10 inches above the Level of the proposed Sill.

Description of the Heights.	Height of Water on Upper Sill.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total No. of Days.
Year 1836.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	4 2	No Registry for this Month.	29	31	30	31	30	31	31	30	31	30	31	335
Height assumed as that of 6 Months' Flood, -	7 5		21	20	14	–	–	–	–	–	28	30	31	144
Height assumed as that of 3 Months' Flood, -	8 2		11	9	–	–	–	–	–	–	2	19	26	67
Height assumed for High Floods, - - -	9 9		–	–	–	–	–	–	–	–	–	–	5	5
Year 1837.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	4 2	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	7 5	19	19	12	–	–	–	–	–	–	–	27	29	106
Height assumed as that of 3 Months' Flood, -	8 2	–	13	6	–	–	–	–	–	–	–	8	15	42
Height assumed for High Floods, - - -	9 9	–	–	–	–	–	–	–	–	–	–	–	–	–
Year 1838.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	4 2	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	7 5	21	25	31	12	–	–	–	–	–	–	24	31	144
Height assumed as that of 3 Months' Flood, -	8 2	6	–	9	–	–	–	–	–	–	–	10	9	34
Height assumed for High Floods, - - -	9 9	–	–	–	–	–	–	–	–	–	–	–	–	–

JAMESTOWN LOCK.—LOWER SILL.
The present Lower Sill is 2 feet 3 inches above the Level of the proposed Sill.

Description of the Heights.	Height of Water on Lower Sill, corresponding with that on Rooskey Up. Sill.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total No. of Days.
Year 1836.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	3 9	No Registry for this Month.	29	31	30	31	30	31	31	30	31	30	31	335
Height assumed as that of 6 Months' Flood, -	7 0		26	24	28	–	–	–	–	–	28	30	31	167
Height assumed as that of 3 Months' Flood, -	7 9		17	19	1	–	–	–	–	–	5	21	31	94
Height assumed for High Floods, - - -	9 4		–	–	–	–	–	–	–	–	–	–	10	10
Year 1837.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	3 9	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	7 0	18	18	10	–	–	–	–	–	–	–	27	27	100
Height assumed as that of 3 Months' Flood, -	7 9	6	17	5	–	–	–	–	–	–	–	9	16	53
Height assumed for High Floods, - - -	9 4	–	–	–	–	–	–	–	–	–	–	–	–	–
Year 1838.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	3 9	31	28	31	30	31	30	31	31	30	31	30	31	365
Height assumed as that of 6 Months' Flood, -	7 0	21	28	31	17	–	–	–	–	–	–	25	31	153
Height assumed as that of 3 Months' Flood, -	7 9	7	–	12	–	–	–	–	–	–	–	12	11	42
Height assumed for High Floods, - - -	9 4	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE showing the NUMBER of DAYS in each MONTH of the following YEARS, on which the WATERS of the RIVER SHANNON, between JAMESTOWN and BATTLE BRIDGE LOCKS, were *at and above* the several Heights undermentioned.

JAMESTOWN LOCK.—UPPER SILL.
The present Upper Sill is 2 feet 6 inches above the Level of the proposed Sill.

Description of the Heights.	Height of Water on Upper Sill.	January.	February.	March.	April.	May.	June.	July.	August.*	September.*	October.	November.	December.	Total No. of Days.
Year 1836.	Ft. In.													
Lowest Summer Water, and proposed fixed Level, - - -	3 6	No Registry for this Month.	29	31	30	31	30	31	31	30	31	30	31	335
Height of Water which is nearly level with the general edge of the Callows in the District, and saturates them,	5 6		29	31	30	12	–	16	8	18	31	30	31	236
Height at which most of the lowest parts of the Callows are flooded, -	6 0		29	31	30	8	–	10	8	18	31	30	31	226
Height assumed as that of 6 Months' Flood.	6 6		29	31	30	3	–	7	8	10	31	30	31	210
Height assumed as that of 3 Months' Flood.	8 6		7	5	–	–	–	–	–	–	–	19	28	59
Height assumed for High Floods, - -	9 9		–	–	–	–	–	–	–	–	–	–	14	14
Highest Floods noted in Guage Books for these Years, - - -	10 6		–	–	–	–	–	–	–	–	–	–	3	3
Year 1837.	Ft. In.													
Lowest Summer Water, and proposed fixed Level, - - -	6	31	28	31	30	31	30	31	31	30	31	30	31	365
Height of Water which is nearly level with the general edge of the Callows in the District, and saturates them,	5 6	31	28	31	28	17	4	–	15	17	27	30	31	259
Height at which most of the lowest parts of the Callows are flooded, -	6 0	31	28	21	–	7	–	–	5	16	10	30	31	179
Height assumed as that of 6 Months' Flood.	6 6	30	19	15	–	–	–	–	–	10	1	30	30	135
Height assumed as that of 3 Months' Flood.	8 6	–	9	1	–	–	–	–	–	–	–	7	13	30
Height assumed for High Floods, - -	9 9	–	–	–	–	–	–	–	–	–	–	–	–	–
Highest Floods noted in Guage Books for these Years, - - -	10 6	–	–	–	–	–	–	–	–	–	–	–	–	–
Year 1838.	Ft. In.													
Lowest Summer Water, and proposed fixed Level, - - -	3 6	31	28	31	30	31	30	31	31	30	31	30	31	365
Height of Water which is nearly level with the general edge of the Callows in the District, and saturates them,	5 6	31	28	31	30	13	–	–	28	26	14	30	31	262
Height at which most of the lowest parts of the Callows are flooded, -	6 0	31	28	31	30	7	–	–	24	15	7	30	31	234
Height assumed as that of 6 Months' Flood,	6 6	30	28	31	29	–	–	–	10	–	5	30	31	194
Height assumed as that of 3 Months' Flood,	8 6	2	–	8	–	–	–	–	–	–	–	9	9	28
Height assumed for High Floods, - -	9 9	–	–	–	–	–	–	–	–	–	–	–	–	–
Highest Floods noted in Guage Books for these Years, - - -	10 6	–	–	–	–	–	–	–	–	–	–	–	–	–

BATTLE BRIDGE LOCK.—LOWER SILL.
The present Lower Sill is 2 feet 11 inches above the Level of the proposed Sill.

Description of the Heights.	Height of Water on Lower Sill, corresponding with that on Jamestown Upper Sill.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total No. of Days.
Year 1836.	Ft. In.													
Lowest Summer Water, and proposed fixed Level, - - - -	3 4	No Registry for this Month.	29	31	30	31	30	31	31	30	31	30	31	335
Height of Water, which is nearly level with the general edge of the Callows in the District, and saturates them,	5 4		29	31	30	11	–	8	17	30	31	30	31	248
Height at which most of the lowest parts of the Callows are flooded, -	5 10		29	31	30	6	–	6	12	26	31	30	31	232
Height assumed as that of 6 Months' Flood.	6 6		29	31	29	–	–	3	5	23	31	30	31	212
Height assumed as that of 3 Months' Flood,	8 10		5	1	–	–	–	–	–	–	–	19	25	50
Height assumed for High Floods, - -	10 4		–	–	–	–	–	–	–	–	–	–	11	11
Highest Floods noted in Guage Books for these Years, - - -	11 5		–	–	–	–	–	–	–	–	–	–	3	3
Year 1837.	Ft. In.													
Lowest Summer Water, and proposed fixed Level, - - -	3 4	31	28	31	30	31	30	31	31	30	31	30	31	365
Height of Water which is nearly level with the general edge of the Callows in the District, and saturates them,	5	31	28	31	28	15	12	–	13	18	27	30	31	264
Height at which most of the lowest parts of the Callows are flooded, -	5 10	31	28	21	10	8	–	–	6	17	17	30	31	199
Height assumed as that of 6 Months' Flood,	6 6	30	20	15	–	–	–	–	–	9	2	30	31	137
Height assumed as that of 3 Months' Flood,	8 10	–	10	–	–	–	–	–	–	–	–	8	10	28
Height assumed for High Floods, - -	10 4	–	–	–	–	–	–	–	–	–	–	–	–	–
Highest Floods noted in Guage Books for these Years, - - -	11 5	–	–	–	–	–	–	–	–	–	–	–	–	–
Year 1838.	Ft. In.													
Lowest Summer Water, and proposed fixed Level, - - -	3 4	31	28	31	30	31	30	31	31	30	31	30	31	365
Height of Water, which is nearly level with the general edge of the Callows in the District, and saturates them,	5 4	31	28	31	30	12	–	–	30	26	14	30	31	263
Height at which most of the lowest parts of the Callows are flooded, -	5 10	31	28	31	30	7	–	–	26	16	11	30	31	241
Height assumed as that of 6 Months' Flood,	6 6	29	28	31	28	–	–	–	10	–	6	30	31	193
Height assumed as that of 3 Months' Flood,	8 10	–	–	3	–	–	–	–	–	–	–	8	–	11
Height assumed for High Floods, - -	10 4	–	–	–	–	–	–	–	–	–	–	–	–	–
Highest Floods noted in Guage Books for these Years, - - -	11 5	–	–	–	–	–	–	–	–	–	–	–	–	–

* No Registry from August 8th to September 13th, 1836.

TABLE showing the NUMBER of DAYS in each MONTH of the following YEARS on which the WATERS of LOUGH ALLEN, at DRUMLEAGUE LOCK, were *at and above* the several HEIGHTS mentioned in the Table.

Appendix A. No. 1.

Height of Water at Drumleague Lock.

DRUMLEAGUE LOCK.—UPPER SILL.
The present Upper Sill is one foot higher than the proposed Sill.

Description of the Heights.	Height of Water on Upper Sill.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total No. of Days.
Year 1836.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	5 0	No Registry for this Month.	29	31	30	31	30	31	31	30	31	30	31	335
Height of Water which is nearly level with the general edge of the Callows round Lough Allen, and saturates them, -	6 9		26	26	25	-	-	8	12	17	31	30	31	206
Height assumed as that of 6 Months' Flood, -	7 6		17	18	12	-	-	3	8	3	29	29	31	150
Height assumed as that of 3 Months' Flood, -	8 6		-	-	-	-	-	-	-	-	-	3	25	28
Height assumed for High Floods, - - -	10 0		-	-	-	-	-	-		-	-	-	4	4
Year 1837.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	5 0	31	28	31	30	31	30	31	31	30	31	30	31	365
Height of Water which is nearly level with the general edge of the Callows round Lough Allen, and saturates them, -	6 9	31	28	29	4	18	8	-	5	18	18	30	31	220
Height assumed as that of 6 Months' Flood, -	7 6	25	19	18	-	-	-	-	-	4	1	30	31	128
Height assumed as that of 3 Months' Flood, -	8 6	6	12	-	-	-	-	-	-	-	-	8	7	33
Height assumed for High Floods, - - -	10 0	-	-	-	-	-	-	-	-	-	-	-	-	-
Year 1838.	Ft. In.													
Lowest Summer Water, & proposed fixed Level,	5 0	31	28	31	30	31	30	31	31	30	31	30	31	365
Height of Water which is nearly level with the general edge of the Callows round Lough Allen, and saturates them, -	6 9	31	28	31	30	4	-	-	25	13	15	30	31	238
Height assumed as that of 6 Months' Flood, -	7 6	19	4	22	15	-	-	-	-	-	6	23	25	114
Height assumed as that of 3 Months' Flood, -	8 6	-	-	4	-	-	-	-	-	-	-	10	7	21
Height assumed for High Floods, - - -	10 0	-	-	-	-	-	-	-	-	-	-	-	-	-

W. T. MULVANY, Civil Engineer.

APPENDIX A, No. 2.—TABLE showing the rate of Rise or Fall of the River Shannon at the undermentioned Locks, for the periods between 1st February, 1836, and 31st December, 1838.

ROOSKEY LOCK.—Upper Sill.

Height of Water on the Sill at which the River began or ceased to Rise or Fall.							TOTAL.				Average rate of Rise or Fall per Diem.	Letter denoting Rise or Fall.
	Date.	Began		Date.	Ceased		Rise.	Fall.	No. of Days.			
		To Rise.	To Fall.		To Rise.	To Fall.			Rising.	Falling.		
		Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.	Ft. In.			Ft. Dec.	
1836.	February 10	-	8 1	March 4	-	6 4	-	1 9	-	23	0.07	F.
	March 4	6 4	-	" 20	8 5	-	2 1	-	16	-	0.13	R.
	" 20	-	8 5	June 3	-	4 7	-	3 10	-	75	0.05	F.
	June 3	4 7	-	August 1	6 7	-	2 1	-	59	-	0.03	R.
	August 1	-	6 7	" 30	-	5 1	-	1 6	-	30	0.05	F.
	" 31	5 1	-	September 11	7 0	-	1 11	-	11	-	0.17	R.
	September 13	-	7 0	" 22	-	6 5	-	0 7	-	9	0.05	F.
	" 22	6 5	-	October 8	7 9	-	1 4	-	17	-	0.09	R.
	October 16	-	7 9	" 20	-	7 7	-	0 2	-	4	0.04	F.
	" 20	7 7	-	" 23	8 0	-	0 5	-	3	-	0.14	R.
	" 24	-	8 0	November 5	-	7 6	-	0 6	-	12	0.04	F.
	November 5	7 6	-	" 22	8 6	-	1 0	-	17	-	0.06	R.
	" 25	-	8 6	" 30	-	8 4	-	0 2	-	5	0.03	F.
	December 1	8 4	-	December 15	9 8	-	1 4	-	14	-	0.09	R.
	" 16	-	9 8	" 30	-	7 7	-	2 1	-	14	0.15	F.
	Total,						10 2	-	137	-	0.07	Average Rise.
							-	10 7	-	172	0.06	Average Fall.
1837.	January 2	-	7 6	January 5	-	7 2	-	0 4	-	3	0.11	F.
	" 10	7 2	-	" 15	7 9	-	0 7	-	5	-	0.12	R.
	" 16	-	7 9	February 6	-	6 8	-	1 1	-	21	0.05	F.
	February 6	6 8	-	" 25	8 10	-	2 2	-	19	-	0.11	R.
	" 27	-	8 10	April 1	-	6 1	-	2 9	-	33	0.08	F.
	April 13	6 1	-	May 4	6 6	-	0 5	-	31	-	0.01	R.
	May 5	-	6 6	June 9	-	5 1	-	1 5	-	35	0.04	F.
	June 10	5 1	-	" 21	5 11	-	0 10	-	11	-	0.07	R.
	" 26	-	5 11	July 13	-	5 0	-	0 11	-	17	0.05	F.
	July 27	5 0	-	August 10	6 0	-	1 0	-	14	-	0.07	R.
	August 14	-	6 0	September 4	-	5 1	-	0 11	-	21	0.04	F.
	September 4	5 1	-	" 22	7 0	-	1 11	-	18	-	0.14	R.
	" 24	-	7 0	October 21	-	5 9	-	1 3	-	27	0.05	F.
	October 27	5 9	-	November 26	8 4	-	2 7	-	30	-	0.09	R.
	November 27	-	8 4	December 14	-	7 0	-	1 4	-	17	0.08	F.
	December 14	7 0	-	" 25	8 3	-	1 3	-	11	-	0.11	R.
	Total,						10 9	-	139	-	0.08	Average Rise.
							-	10 0	-	174	0.06	Average Fall.
1838.	January 1	-	8 1	January 22	-	6 9	-	1 4	-	21	0.06	F.
	" 22	6 9	-	February 10	7 11	-	1 2	-	19	-	0.06	R.
	February 11	-	7 11	" 23	-	7 2	-	0 9	-	12	0.09	F.
	" 25	7 2	-	March 20	8 2	-	1 0	-	23	-	0.04	R.
	March 23	-	8 2	" 5	-	7 1	-	1 1	-	13	0.08	F.
	April 7	7 1	-	" 15	7 5	-	0 4	-	8	-	0.04	R.
	" 15	-	7 5	June 13	-	4 9	-	2 8	-	59	0.05	F.
	July 17	4 8	-	August 27	6 11	-	2 2	-	42	-	0.05	R.
	August 29	-	6 11	October 12	-	5 0	-	1 11	-	44	0.04	F.
	October 15	5 0	-	November 10	8 3	-	3 3	-	26	-	0.14	R.
	November 10	-	8 3	" 28	-	7 0	-	1 3	-	18	0.07	F.
	" 28	7 0	-	December 7	8 0	-	1 0	-	9	-		R.
	December 7	-	8 0	" 21	-	7 3	-	0 9	-	14	0.11	F.
	" 22	7 3	-	" 29	7 11	-	0 8	-	7	-	0.09	R.
	Total,						9 7	-	134	-	0.07	Average Rise.
							-	9 9	-	181	0.05	Average Fall.

JAMESTOWN LOCK.—Lower Sill.

Height of Water on the Sill at which the River began or ceased to Rise or Fall.							TOTAL.				Average rate of Rise or Fall per Diem.	Letter denoting Rise or Fall.
	Date.	Began		Date.	Ceased		Rise.	Fall.	No. of Days.			
		To Rise.	To Fall.		To Rise.	To Fall.			Rising.	Falling.		
		Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.	Ft. In.			Ft. Dec.	
1836.	February 1	7 4	-	February 8	8 5	-	1 1	-	7	-	0.15	R.
	" 8	-	8 5	March 4	-	6 8	-	1 9	-	25	0.07	F.
	March 4	6 6	-	" 20	8 2	-	1 8	-	16	-	0.10	R.
	" 21	-	8 2	June 19	-	4 6	-	3 8	-	90	0.04	F.
	June 21	4 6	-	August 4	6 8	-	2 2	-	44	-	0.05	R.
		-	-		-	-	-	-	-	-	-	-
	September 13	-	6 7	September 22	-	6 1	-	0 6	-	9	0.06	F.
	" 22	6 1	-	October 25	7 9	-	1 8	-	33	-	0.05	R.
		-	-		-	-	-	-	-	-	-	-
		-	-		-	-	2 5	-	-	-	-	-
	October 28	-	7 9	November 4	-	-	-	0 7	-	7	0.08	F.
	November 5	7 2	-	December 15	9 7	7 2	-	-	40	-	0.06	R.
		-	-		-	-	-	-	-		-	-
		-	-		-	-	-	-	-	-	-	-
	December 15	-	9 7	" 31	-	7 3	-	2 4	-	16	0.14	F.
	Total,						9 0	-	140	-	0.06	Average Rise.
							-	8 10	-	147	0.06	Average Fall.
1837.	January 1	-	7 3	January 6	-	6 6	-	0 9	-	5	0.15	F.
	" 7	6 6	-	" 14	7 8	-	1 2	-	7	-	0.17	R.
	" 19	-	7 7	February 1	-	6 4	-	1 3	-	13	0.10	F.
	February 8	6 4	-	" 22	8 7	-	2 3	-	14	-	0.16	R.
	" 25	-	8 7	April 18	-	5 5	-	3 2	-	52	0.06	F.
	April 19	5 5	-	May 5	6 3	-	0 10	-	16	-	0.05	R.
	May 5	-	6 3	June 8	-	4 6	-	1 9	-	34	0.05	F.
	June 8	4 6	-	" 24	5 7	-	1 1	-	16	-	0.07	R.
	" 25	-	5 7	July 23	-	4 6	-	1 1	-	28	0.04	F.
	July 26	4 6	-	August 11	5 7	-	1 1	-	16	-	0.07	R.
	August 12	-	5 7	September 4	-	4 9	-	0 10	-	23	0.04	F.
	September 5	4 9	-	" 21	6 7	-	1 10	-	16	-	0.11	R.
	" 23	-	6 7	October 22	-	5 4	-	1 3	29	-	0.04	F.
	October 25	5 4	-	November 25	8 1	-	2 9	-	31	-	0.09	R.
	November 30	-	8 0	December 15	-	6 5	-	1 7	-	15	0.11	F.
	December 17	6 5	-	" 25	7 11	-	1 6	-	8	-	0.19	R.
	Total,						12 6	-	153	-	0.08	Average Rise.
							-	11 10	-	170	0.07	Average Fall.
1838.	January 1	-	7 9	January 20	-	6 6	-	1 3	-	19	0.07	F.
	" 22	6 6	-	February 10	7 4	-	0 10	-	19	-	0.04	R.
	February 10	-	7 4	" 25	-	6 11	-	0 5	-	15	0.03	F.
	" 25	6 11	-	March 20	8 0	-	1 1	-	23	-	0.05	R.
	March 20	-	8 0	June 20	-	4 0	-	4 0	-	92	0.04	F.
		-	-		-	-	-	-	-	-	-	-
	June 20	4 0	-	August 27	6 8	-	2 8	-	68	-	0.04	R.
		-	-		-	-	-	-	-	-	-	-
	August 27	-	6 8	October 13	-	4 6	-	2 2	-	47	0.05	F.
	October 15	4 6	-	November 12	8 0	-	3 6	-	28	-	0.13	R.
	November 12	-	8 0	" 28	-	6 7	-	1 5	-	16	0.09	F.
	" 28	6 7	-	December 5	7 9	-	1 2	-	7	-	0.17	R.
	December 8	-	7 9	" 19	-	6 11	-	0 10	-	11	0.07	F.
	" 21	6 11	-	" 29	7 9	-	0 10	-	8	-	0.10	R.
	Total,						10 1	-	153	-	0.07	Average Rise.
							-	10 1	-	200	0.05	Average Fall.

TABLE showing the rate of Rise or Fall of the River Shannon at the undermentioned Locks, for the periods between 1st February, 1836, and 31st December, 1838.

JAMESTOWN LOCK.—Upper Sill.

Height of Water on the Sill at which the River began or ceased to Rise or Fall.							TOTAL.				Average Rate of Rise or Fall per Diem.	Letter denoting Rise or Fall.
Date.		Began		Date.	Ceased		Rise.	Fall.	No. of Days.			
		To Rise.	To Fall.		To Rise.	To Fall.			Rising.	Falling.		
		Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.	Ft. In.			Ft. Dec.	
1836.	February 1	8 0	-	February 5	8 11	-	0 11	-	4		0.23	R.
	" 7	-	8 11	March 1	-	6 6	-	2 5	-	23	0.10	F.
	March 1	6 6	-	" 18	8 8	-	2 2	-	17	-	0.13	R.
	" 18	-	8 8	May 29	-	4 3	-	4 5	-	72	0.06	F.
	June 22	4 3	-	August 1	6 11	-	2 8	-	40	-	0.07	R.
		-	-		-	6 0	-	0 8	-	9	-	-
		-	-		-	-	-	-	-	-	-	-
	September 13	-	6 8	September 22	-	-	-	-	-	-	0.08	F.
	" 22	6 0	-	October 9	8 0	-	2 0	-	17	-	0.12	R.
	October 10	-	8 0	" 21	-	7 4	-	0 8	-	11	0.07	F.
	" 21	7 4	-	" 26	8 0	-	0 8	-	5	-	0.13	R.
	" 26	-	8 0	November 4	-	7 2	-	0 10	-	9	0.09	F.
	November 4	7 2	-	" 18	8 9	-	1 7	-	14	-	0.12	R.
	" 19	-	8 9	" 28	-	8 4	-	0 5	-	9	0.05	F.
	" 29	8 4	-	December 15	10 6	-	2 2	-	16	-	0.14	R.
	December 15	-	10 6	" 31	-	7 0	-	3 6	-	16	0.22	F.
	Total,						12 2	-	113	-	0.11	Average Rise.
							-	12 11	-	149	0.09	Average Fall.
1837.	January 1	-	6 10	January 6	-	6 4	-	0 6	-	5	0.10	F.
	" 7	6 4	-	" 17	7 5	-	1 1	-	10	-	0.11	R.
	" 18	-	7 5	February 1	-	6 2	-	1 3	-	14	0.09	F.
	February 8	6 2	-	" 24	8 9	-	2 7	-	16	-	0.16	R.
	" 24	-	8 9	April 18	-	5 3	-	3 6	-	53	0.07	F.
	April 19	5 3	-	May 4	6 2	-	0 11	-	15	-	0.06	R.
	May 4	-	6 2	June 8	-	4 5	-	1 9	-	35	0.05	F.
	June 8	4 5	-	" 18	5 5	-	1 0	-	10	-	0.10	R.
	" 19	-	5 5	July 23	-	4 5	-	1 0	-	34	0.03	F.
	July 26	4 5	-	August 5	6 0	-	1 7	-	10	-	0.16	R.
	August 5	-	6 0	September 1	-	4 5	-	1 7	-	27	0.06	F.
	September 1	4 5	-	" 18	6 9	-	2 4	-	17	-	0.14	R.
	" 22	-	6 9	October 20	-	5 3	-	1 6	-	28	0.05	F.
	October 23	5 3	-	November 27	8 10	-	3 7	-	35	-	0.10	R.
	November 28	-	8 10	December 15	-	6 3	-	2 7	-	17	0.15	F.
	December 15	6 3	-	" 24	8 8	-	2 5	-	9	-	0.27	R.
	Total,						15 6	-	122	-	0.13	Average Rise.
							-	13 8	-	213	0.06	Average Fall.
1838.	January 2	-	8 4	January 22	-	6 2	-	2 2	-	20	0.11	F.
	" 22	6 2	-	February 9	7 11	-	1 9	-	18	-	0.10	R.
	February 10	-	7 11	" 23	-	6 11	-	1 0	-	13	0.08	F.
	" 23	6 11	-	March 21	8 9	-	1 10	-	26	-	0.07	R.
	March 21	-	8 9	July 6	-	3 10	-	4 11	-	107	0.05	F.
	July 6	3 10	-	August 23	6 8	-	2 10	-	48	-	0.06	R.
	August 27	-	6 8	October 11	-	4 6	-	2 2	-	45	0.05	F.
	October 14	4 6	-	November 10	8 11	-	4 5	-	27	-	0.16	R.
	November 10	-	8 11	" 28	-	6 10	-	2 1	-	18	0.11	F.
	" 28	6 10	-	December 5	8 6	-	1 8	-	7	-	0.24	R.
	December 7	-	8 6	" 20	-	7 1	-	1 5	-	13	0.11	F.
	" 20	7 1	-	" 31	8 5	-	1 4	-	11	-	0.12	R.
	Total,						13 10	-	137	-	0.10	Average Rise.
							-	13 9	-	216	0.06	Average Fall.

BATTLE BRIDGE LOCK.—Lower Sill.

Height of Water on the Sill at which the River began or ceased to Rise or Fall.							TOTAL.				Average Rate of Rise or Fall per Diem.	Letter denoting Rise or Fall.
Date.		Began		Date.	Ceased		Rise.	Fall.	No. of Days.			
		To Rise.	To Fall.		To Rise.	To Fall.			Rising.	Falling.		
		Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.	Ft. In.			Ft. Dec.	
1836.	February 1	8 6	-	February 4	8 11	-	0 5	-	3	-	0.13	R.
	" 4	-	8 11	March 3	-	6 2	-	2 9	-	28	0.10	F.
	March 5	6 2	-	" 17	8 8	-	2 6	-	12	-	0.21	R.
	" 17	-	8 8	June 2	-	3 10	-	4 10	-	77	0.06	F.
	June 20	3 11	-	August 1	6 8	-	2 9	-	42	-	0.07	R.
	August 1	-	6 8	" 26	-	4 9	-	1 11	-	25	0.08	F.
	" 27	4 9	-	September 9	6 10	-	2 1	-	13	-	0.16	R.
	September 9	-	6 10	" 23	-	5 2	-	1 8	-	14	0.12	F.
	" 23	5 2	-	October 8	8 2	-	3 0	-	15	-	0.20	R.
	October 10	-	8 2	" 19	-	7 7	-	0 7	-	9	0.06	F.
	" 19	7 7	-	" 24	8 4	-	0 9	-	5	-	0.15	R.
	" 24	-	8 4	November 4	-	7 3	-	0 11	-	11	0.08	F.
	November 4	7 3	-	" 15	9 1	-	1 10	-	11	-	0.17	R.
	" 16	-	9 0	" 22	-	8 9	-	0 3	-	6	0.04	F.
	" 30	8 9	-	December 13	11 5	-	2 7	-	13	-	0.20	R.
	December 15	-	11 5	" 31	-	7 1	-	4 4	-	16	0.27	F.
	Total,						15 11	-	114	-	0.14	Average Rise.
							-	17 3	-	186	0.09	Average Fall.
1836.	January 1	-	6 10	January 5	-	6 6	-	0 4	-	4	0.08	F.
	" 5	6 6	-	" 14	7 9	-	1 3	-	8	-	0.16	R.
	" 14	-	7 9	February 3	-	6 1	-	1 8	-	20	0.08	F.
	February 6	6 1	-	" 24	9 5	-	3 4	-	18	-	0.18	R.
	" 24	-	9 5	April 19	-	5 2	-	4 3	-	54	0.08	F.
	April 20	5 2	-	May 1	6 2	-	1 0	-	11	-	0.08	R.
	May 6	-	6 1	June 6	-	4 5	-	1 8	-	31	0.05	F.
	June 9	4 5	-	" 12	5 11	-	1 6	-	3	-	0.50	R.
	" 12	-	5 11	July 12	-	4 2	-	1 9	-	30	0.06	F.
	July 17	4 2	-	August 5	5 11	-	1 9	-	19	-	0.09	R.
	August 5	-	5 11	September 1	-	4 3	-	1 8	-	27	0.06	F.
	September 1	4 3	-	" 18	6 10	-	2 7	-	17	-	0.15	R.
	" 20	-	6 10	October 23	-	5 1	-	1 9	-	33	0.05	F.
	October 23	5 1	-	November 23	9 0	-	4 11	-	31	-	0.16	R.
	November 28	-	8 11	December 15	-	6 7	-	2 4	-	17	0.14	F.
	December 15	6 7	-	" 23	8 11	-	2 4	-	8	-	0.29	R.
	Total,						18 8	-	115	-	0.16	Average Rise.
							-	15 5	-	216	0.07	Average Fall.
1838.	January 2	-	8 5	January 21	-	6 2	-	2 3	-	19	0.12	F.
	" 21	6 2	-	February 9	7 11	-	1 9	-	19	-	0.09	R.
	February 10	-	7 11	" 22	-	6 10	-	0 11	-	12	0.08	F.
	" 24	6 10	-	March 20	8 9	-	1 11	-	24	-	0.08	R.
	March 21	-	8 9	July 8	-	3 8	-	5 1	-	109	0.05	F.
	July 10	3 8	-	August 25	6 9	-	3 1	-	46	-	0.07	R.
	August 26	-	6 9	October 13	-	4 4	-	2 5	-	48	0.05	F.
	October 14	4 4	-	November 10	9 2	-	4 10	-	27	-	0.18	R.
	November 10	-	9 2	" 27	-	6 11	-	2 3	-	17	0.13	F.
	" 27	6 11	-	December 6	8 9	-	1 10	-	9	-	0.20	R.
	December 6	-	8 9	" 20	-	7 0	-	1 9	-	14	0.12	F.
	" 20	7 0	-	" 31	8 6	-	1 6	-	11	-	0.14	R.
	Total,						14 11	-	136	-	0.11	Average Rise.
							-	14 8	-	219	0.07	Average Fall.

Appendix A. No. 2.

Rate of Rise and Fall of Lough Allen.

TABLE showing the rate of Rise or Fall of LOUGH ALLEN at DRUMLEAGUE LOCK, for the Periods between the 1st February, 1836, and the 31st December, 1838.

DRUMLEAGUE LOCK.—UPPER SILL.

Height of Water on the Sill at which the River began or ceased to Rise or Fall.						TOTAL.				Average Rate of Rise or Fall per Diem.	Letter denoting Rise or Fall.
Date.	Began		Date.	Ceased		Rise.	Fall.	No. of Days.			
	To Rise.	To Fall.		To Rise.	To Fall.			Rising.	Falling.		
1836.			1836.	Ft. In.	Ft. In.	Ft. In.	Ft. In.			Ft. Dec.	
February 1	7 9	-	February 5	8 2	-	0 5	-	4	-	0.10	R.
,, 7	-	8 2	March 2	-	6 3	-	1 11	-	24	0.08	F.
March 3	6 3	-	,, 19	7 10	-	1 7	-	16	-	0.10	R.
,, 19	-	7 10	June 2	-	5 4	-	2 6	-	75	0.03	F.
June 20	5 5	-	August 2	7 10	-	2 5	-	43	-	0.06	R.
August 3	-	7 10	,, 27	-	5 9	-	2 1	-	24	0.08	F.
,, 28	5 9	-	September 5	7 5	-	1 7	-	8	-	0.20	R.
September 6	-	7 5	,, 17	-	5 8	-	1 9	-	11	0.16	F.
,, 18	5 8	-	October 10	8 3	-	2 7	-	22	-	0.12	R.
October 10	-	8 3	,, 18	-	7 7	-	0 8	-	8	0.08	F.
,, 19	7 7	-	,, 22	7 10	-	0 3	-	3	-	0.08	R.
,, 23	-	7 10	November 1	-	7 3	-	0 7	-	9	0.06	F.
November 1	7 3	-	,, 15	8 2	-	0 11	-	14	-	0.07	R.
,, 16	-	8 2	,, 20	-	7 11	-	0 3	-	4	0.06	F.
,, 21	7 11	-	December 13	9 11	-	2 0	-	22	-	0.09	R.
December 15	-	9 11	,, 31	-	7 6	-	2 5	-	16	0.15	F.
TOTAL,...						11 9	-	132	-	0.09	Av. Rise.
						-	12 2	-	171	0.07	Av. Fall.
1837.			1837.								
January 5	7 7	-	January 10	8 6	-	0 11	-	5	-	0.18	R.
,, 12	-	8 6	February 2	-	6 9	-	1 9	-	21	0.08	F.
February 6	6 10	-	,, 20	9 1	-	2 3	-	14	-	0.16	R.
,, 20	-	9 1	April 11	-	6 4	-	2 9	-	50	0.05	F.
April 13	6 4	-	May 6	6 11	-	0 7	-	23	-	0.03	R.
May 12	-	6 10	,, 31	-	6 0	-	0 10	-	19	0.04	F.
June 2	6 1	-	June 14	6 8	-	0 7	-	12	-	0.05	R.
,, 14	-	6 8	July 13	-	5 7	-	1 1	-	29	0.04	F.
July 17	5 7	-	August 5	6 11	-	1 4	-	19	-	0.07	R.
August 5	-	6 11	,, 28	-	5 11	-	1 0	-	23	0.04	F.
September 7	5 11	-	September 18	7 5	-	1 6	-	11	-	0.14	R.
,, 19	-	7 5	October 19	-	6 3	-	1 2	-	30	0.04	F.
October 20	6 3	-	November 24	8 9	-	2 6	-	35	-	0.07	R.
November 27	-	8 9	December 13	-	7 6	-	1 3	-	16	0.08	F.
December 13	7 6	-	,, 23	8 8	-	1 2	-	10	-	0.12	R.
TOTAL,...						10 10	-	129	-	0.08	Av. Rise.
						-	9 10	-	188	0.05	Av. Fall.
1838.			1838.								
January 2	-	8 3	January 20	-	6 7	-	1 8	-	18	0.09	F.
,, 21	6 7	-	,, 25	7 8	-	1 1	-	4	-	0.27	R.
,, 27	-	7 8	February 18	-	6 9	-	0 11	-	22	0.04	F.
February 18	6 9	-	March 20	8 7	-	1 10	-	30	-	0.06	R.
March 21	-	8 7	July 6	-	5 4	-	3 3	-	107	0.03	F.
July 8	5 4	-	August 23	7 8	-	2 4	-	46	-	0.05	R.
August 23	-	7 8	October 11	-	5 8	-	2 0	-	49	0.04	F.
October 14	5 8	-	November 9	9 1	-	3 5	-	26	-	0.13	R.
November 9	-	9 1	,, 26	-	6 10	-	3 3	-	17	0.19	F.
,, 26	6 10	-	December 5	8 8	-	1 10	-	9	-	0.20	R.
December 5	-	8 8	,, 19	-	6 11	-	1 9	-	14	0.12	F.
,, 19	6 11	-	,, 29	8 3	-	1 4	-	10	-	0.13	R.
TOTAL,...						11 10	-	125	-	0.10	Av. Rise.
						-	12 10	-	227	0.06	Av. Fall.

W. T. MULVANY, Civil Engineer.

Appendix A. No. 3.

Heights of Water on Lock Sills, February, 1836.

APPENDIX A, No. 3.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN.

1836.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Feb. 1	-	-	-	-	12	0	-	-	-	-	-	-	-	-
2	-	-	-	-	12	6	-	-	-	-	-	-	-	-
3	-	-	-	-	12	8	-	-	-	-	-	-	-	-
4	-	-	-	-	12	8	-	-	-	-	-	-	-	-
5	-	-	-	-	12	7	-	-	-	-	-	-	-	-
6	-	-	-	-	12	7	-	-	-	-	-	-	-	-
7	-	-	-	-	12	7	-	-	-	-	-	-	-	-
8	-	-	-	-	12	6	-	-	-	-	-	-	-	-
9	-	-	-	-	12	6	-	-	-	-	-	-	-	-
10	-	-	-	-	12	6	-	-	-	-	-	-	-	-
11	-	-	-	-	12	6	-	-	-	-	-	-	-	-
12	-	-	-	-	12	5	-	-	-	-	-	-	-	-
13	-	-	-	-	12	5	-	-	-	-	-	-	-	-
14	-	-	-	-	12	5	-	-	-	-	-	-	-	-
15	-	-	12	1½	12	5	-	-	-	-	-	-	-	-
16	-	-	12	1	12	2	-	-	-	-	-	-	-	-
17	-	-	12	1	12	3	-	-	-	-	-	-	-	-
18	-	-	11	11	12	2	-	-	-	-	-	-	-	-
19	-	-	11	9½	12	0	-	-	-	-	-	-	-	-
20	-	-	11	8	12	0	-	-	-	-	-	-	-	-
21	-	-	11	5	11	11	-	-	-	-	-	-	-	-
22	11	3½	11	5	11	11	-	-	-	-	-	-	-	-
23	11	3	11	4	11	10	-	-	-	-	-	-	-	-
24	11	1½	11	1	11	9	-	-	-	-	-	-	-	-
25	11	0	11	0	11	7	-	-	-	-	-	-	-	-
26	10	11	10	11	11	6	-	-	-	-	-	-	-	-
27	10	9½	10	9	11	5	-	-	-	-	-	-	-	-
28	10	8	10	7	11	4	-	-	-	-	-	-	-	-
29	10	6½	10	5	11	3	-	-	-	-	-	-	-	-

1836.	Shannon Bridge.				Athlone.				Lanesborough.				Cloondrah.			
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Feb. 1	-	-	-	-	-	-	-	-	8	2	9	0	9	8	10	8
2	-	-	-	-	-	-	-	-	8	3	9	1	9	8	10	8
3	-	-	-	-	-	-	-	-	8	4	9	2	9	8	10	8
4	-	-	-	-	-	-	-	-	8	5	9	3	9	9	10	9
5	-	-	-	-	-	-	-	-	8	7	9	4	9	9	10	6
6	-	-	-	-	-	-	-	-	8	8	9	5	9	5	10	4
7	-	-	-	-	-	-	-	-	8	9	9	6	9	3	10	0
8	-	-	-	-	-	-	-	-	8	10	9	5	9	3	9	8
9	-	-	-	-	-	-	-	-	8	11	9	5	9	2	9	6
10	-	-	-	-	-	-	-	-	9	0	9	5	9	0	9	6
11	-	-	-	-	-	-	-	-	8	11	9	5	9	1	9	6
12	-	-	-	-	-	-	-	-	8	11	9	4	9	1	9	6
13	-	-	-	-	-	-	-	-	9	0	9	3	9	0	9	5
14	-	-	-	-	-	-	-	-	9	1	9	3	9	0	9	5
15	-	-	-	-	-	-	-	-	9	0	9	2	8	11	9	4
16	-	-	-	-	-	-	-	-	8	11	9	1	8	11	9	4
17	-	-	-	-	-	-	-	-	8	11	9	1	8	11	9	4
18	-	-	-	-	-	-	-	-	8	9	9	0	8	10	9	3
19	-	-	-	-	-	-	-	-	8	8	8	10	8	10	9	3
20	-	-	-	-	-	-	-	-	8	7	8	9	8	8	9	1
21	-	-	-	-	-	-	-	-	8	6	8	8	8	7	9	0
22	-	-	-	-	-	-	-	-	8	5	8	7	8	6	8	11
23	-	-	-	-	-	-	-	-	8	4	8	6	8	5	8	10
24	-	-	-	-	-	-	-	-	8	3	8	5	8	5	8	10
25	9	3	9	0	9	1	7	9	8	1	8	3	8	4	8	9
26	9	2	9	0	9	1	7	9	8	0	8	3	8	0	8	9
27	9	2	9	0	9	0	7	9	7	10	8	1	7	10	8	8
28	9	3	8	10	8	9	7	6	7	10	8	0	7	9	8	7
29	9	3	8	10	8	9	7	6	7	11	7	11	7	8	8	7

1836.	Rooskey.				Jamestown.				Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.					
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Feb. 1	8	9	8	7	7	4	7	11	8	6	7	9
2	8	9	8	1	7	6	8	0	8	9	7	10
3	8	9	8	8	7	7	8	2	8	11	7	11
4	8	10	8	1	7	9	8	4	8	10	8	1
5	8	10	8	1	7	9	8	10	8	9	8	2
6	8	10	8	1	7	11	8	10	8	8	8	2
7	8	8	8	2	8	1	8	10	8	7	8	2
8	8	8	8	2	8	5	8	9	8	6	8	1
9	8	7	8	1	8	2	8	6	8	5	7	11
10	8	6	8	1	8	1	8	4	8	4	7	10
11	8	6	8	0	8	1	8	2	8	3	7	9
12	8	6	7	11	7	11	8	2	8	1	7	8
13	8	6	7	10	7	11	8	2	8	1	7	7
14	8	4	7	9	7	11	8	1	8	0	7	5
15	8	2	7	8	7	11	8	0	7	10	7	5
16	8	0	7	7	7	10	7	11	7	9	7	5
17	7	10	7	6	7	9	7	10	7	7½	7	5
18	7	9	7	6	7	7	7	8	7	6½	7	2
19	7	8	7	6	7	7	7	6	7	4½	7	0
20	7	7	7	4	7	5	7	4	7	3½	6	11
21	7	6	7	3	7	4	7	3	7	2	6	10
22	7	5	7	2	7	3	7	2	7	1½	6	10
23	7	4	7	1	7	2	7	1	6	11	6	9
24	7	3	7	1	7	2	7	1	6	10	6	8
25	7	2	6	11	7	1	7	0	6	8	6	8
26	7	1	6	9	6	11	6	10	6	6½	6	7
27	7	1	6	8	6	9	6	8	6	5	6	6
28	7	0	6	7	6	8	6	7	6	4	6	5
29	6	11	6	6	6	8	6	5	6	3	6	4

Appendix A. No. 3.

Heights of Water on Lock Sills, March, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Mar. 1	10	5½	10	4	11	1	6	10	8	6	9	8	10	2	9	4	8	10	8	9	7	6	7	10	7	11	7	8	8	8	6	11	6	5	6	8	6	5	6	3	6	4
2	10	4¾	10	2	11	1	6	10½	8	5	9	8	10	2	9	3	8	10	8	9	7	6	7	9	7	10	7	8	8	8	6	10	6	6	6	9	6	8	6	3	6	3
3	10	4	10	2	11	0½	6	11	8	4	9	10	10	4	9	4	8	10	8	9	7	6	7	9	7	10	7	8	8	8	6	10	6	6	6	7	6	6	6	2½	6	3
4	10	3	10	0	11	1	6	11	8	3	9	10	10	4	9	4	8	10	8	9	7	3	7	9	7	11	7	7	8	7	6	9	6	4	6	6	6	7	6	2½	6	4
5	10	4	10	2	11	1	6	11	8	11	9	11	10	5	9	4	8	10	8	7	7	1	7	9	7	11	7	7	8	7	6	10	6	6	6	7	6	7	6	2½	6	6
6	10	6	10	6	11	1	6	11½	8	3	10	0	10	6	9	4	8	11	8	9	7	3	7	7	7	11	7	4	8	4	6	11	6	8	6	7	6	8	6	6	6	9
7	10	7	10	6	11	2½	6	11½	8	4	10	1	10	7	9	3	8	11	8	9	7	3	7	6	8	1	7	6	8	10	7	1	6	9	6	9	7	0	6	11	6	10
8	10	7	10	6	11	3	6	10½	8	5	10	1	10	7	9	3	8	10	8	9	7	3	7	7	8	2	7	8	9	0	7	3	6	11	6	11	7	2	7	0	6	10
9	10	7½	10	5	11	3	6	10	8	6	10	0	10	6	9	3	8	10	8	7	7	3	7	7	8	2	7	8	9	1	7	3	7	0	7	0	7	1	7	0	6	11
10	10	6	10	5	11	2	6	10½	8	7	10	0	10	6	9	4	8	11	8	7	7	3	7	9	8	1	7	9	9	2	7	4	7	1	7	2	7	1	7	0	7	0
11	10	6	10	8	11	2	6	10½	8	8	10	1	10	7	9	4	8	11	8	7	7	3	7	9	8	3	7	10	9	3	7	5	7	2	7	3	7	2	7	2	7	0
12	10	10	10	10	11	3	6	11	9	1	10	3	10	9	9	4	8	11	9	2	7	6	7	10	8	5	8	0	9	3	7	7	7	4	7	4	7	6	7	6½	7	2
13	10	11	11	0	11	6	6	11	9	1	10	4	10	10	9	4	8	11	9	3	7	7	7	11	8	7	8	2	9	4	7	8	7	5	7	6	7	8	7	7	7	3
14	11	3	11	2½	11	9	9	8	8	8	10	6	11	0	9	4	8	11	9	4	7	6	7	11	8	7	8	6	9	4	7	10	7	5	7	9	8	0	8	0	7	4
15	11	4	11	8	12	0	9	8	8	8	10	9	11	3	9	5	8	11	9	9	7	7	8	4	8	9	8	7	9	5	8	0	7	6	7	9	8	1	8	0	7	5
16	11	6	11	8½	12	0	9	8	8	9	10	11	11	5	9	5	9	0	9	10	7	9	8	4	8	9	8	7	9	5	8	2	7	8	7	10	8	1	8	0	7	6
17	11	5	12	0	12	0	9	8	8	10	11	1	11	7	9	11	9	5	10	4	7	9	8	3	9	0	8	8	9	5	8	3	7	11	7	11	8	6	8	8	7	8
18	11	11	12	4½	12	6	9	8	8	11	11	2	11	8	9	10	9	5	10	2	7	9	8	4	9	2	8	8	9	5	8	2	8	1	8	1	8	7	8	7	7	10
19	12	1	12	6½	12	9	9	8	9	1	11	0	11	6	9	9	9	5	10	2	8	0	8	5	9	2	8	8	9	6	8	0	8	3	8	1	8	6	8	5½	7	10
20	12	1	12	7	12	9	9	8	9	4	11	0	11	6	9	10	9	5	10	1	8	0	8	6	9	2	8	10	9	5	7	11	8	5	8	2	8	5	8	5½	7	9
21	12	0	12	6	12	7½	9	8	9	2	10	9	11	3	9	10	9	5	10	0	8	0	8	7	9	1	8	11	9	4	7	10	8	4	8	2	8	4	8	5	7	8
22	12	1	12	6	12	6	10	6	9	0	10	9	11	3	9	9	9	5	9	9	8	0	8	8	9	1	8	11	9	4	7	10	8	3	8	2	8	3	8	3	7	7
23	11	8½	12	3	12	5	10	7	8	10	10	7	11	1	9	10	9	5	9	9	8	0	8	9	9	2	8	11	9	4	7	11	8	2	8	0	8	2	8	2	7	6
24	11	11	12	3	12	4	10	7	8	10	10	6	11	0	9	11	9	7	9	9	8	0	8	10	9	2	8	10	9	3	7	11	8	1	8	0	8	2	8	1	7	5
25	11	11½	12	2	12	4	10	4½	8	10	10	6	11	0	9	11	9	7	9	9	8	3	8	9	9	0	8	9	9	2	8	0	8	1	7	11	8	2	7	11	7	5
26	11	10	12	2	12	5	10	5	8	10	10	6	11	0	9	9	9	7	9	9	8	3	8	9	9	0	8	8	9	2	8	1	7	11	7	10	8	1	7	9	7	4
27	11	9	12	1	12	5	10	4	8	10	9	11	10	11	9	9	9	7	9	9	8	3	8	8	8	11	8	8	9	1	8	0	7	9	7	9	8	1	7	9	7	5
28	11	10	12	1	12	5	10	1	8	10	10	4	10	10	9	9	9	7	9	9	8	3	8	7	8	11	8	6	9	8	7	11	7	8	7	8	7	10	7	8	7	5
29	11	8	12	0	12	4	10	2	8	9	10	4	10	10	9	7	9	4	9	7	8	3	8	6	8	10	8	6	9	3	7	11	7	8	7	9	7	9	7	7	7	4
30	11	9	12	0	12	2	10	3	8	11	10	4	10	10	9	9	9	7	9	7	8	3	8	7	8	10	8	7	9	5	7	11	7	8	7	8	7	9	8	0	7	5
31	11	8	11	11	12	2	10	6	8	10	10	7	11	1	9	11	9	8	9	7	8	3	8	8	8	11	8	7	9	6	8	0	7	9	7	8	8	2	8	1	7	6

Appendix A. No. 3.

Heights of Water on Lock Sills, April, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina.	Cussaan.	Killaloe.	Hamilton.		Banagher.		Shannon Bridge.		Athlone.		Lanesborough.		Cloondrah.		Rooskey.		Jamestown.		Battle Bridge.	Drumleague.
	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.*	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Lower Sill.	Upper Sill.
	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.
April 1	11 10	12 1	12 5	10 3	8 10	10 9	11 3	9 11	9 8	9 9	8 3	8 8	9 0	8 8	9 7	7 11	7 8	7 8	8 0	7 10	7 7
2	11 9½	12 1	12 4	10 3½	8 10	10 9	11 3	9 11	9 8	9 10	8 3	8 7	9 0	8 8	9 7	7 10	7 7	7 6	7 9	7 8½	7 7
3	11 8¾	12 0	12 4	10 1	8 11	10 8	11 2	9 9	9 7	9 9	8 1	8 7	9 0	8 7	9 6	7 10	7 6	7 5	7 9	7 6½	7 6
4	11 7	11 10	12 2	10 0½	8 10	10 6	11 0	9 10	9 8	9 9	8 1	8 7	8 10	8 7	9 6	7 9	7 6	7 4	7 8	7 5½	7 5
5	11 7	11 9	12 2	10 0	8 9	10 6	11 0	9 10	9 8	9 8	8 1	8 6	8 8	8 6	9 5	7 8	7 5	7 3	7 8	7 6½	7 4
6	11 6	11 8	12 1	10 0	8 8	10 4	10 10	9 10	9 8	9 7	8 0	8 6	8 8	8 5	9 4	7 8	7 5	7 3	7 8	7 6½	7 6
7	11 2	11 8	12 1	9 11	8 7	10 4	10 10	9 9	9 7	9 7	8 0	8 5	8 7	8 5	9 4	7 8	7 6	7 5	7 8	7 7	7 8
8	11 6	11 7	12 1	9 10	8 8	10 5	10 11	9 8	9 7	9 7	8 0	8 5	8 8	8 4	9 3	7 9	7 5	7 5	7 8	7 7	7 7
9	11 5	11 7	12 1	9 10	8 10	10 4	10 10	9 8	9 6	9 5	8 0	8 4	8 7	8 4	9 3	7 8	7 4	7 5	7 8	7 7	7 5
10	11 4	11 6	12 0	9 9	8 10	10 4	10 10	9 8	9 6	9 5	8 0	8 4	8 7	8 3	9 2	7 8	7 4	7 6	7 8	7 6½	7 4
11	11 3¾	11 4	11 11	9 11	8 8	10 4	10 10	9 7	9 5	9 5	7 10	8 5	8 6	8 3	9 2	7 7	7 4	7 5	7 7	7 6	7 5
12	11 2	11 4	11 10	9 10	8 8	10 2	10 8	9 7	9 5	9 5	7 10	8 5	8 6	8 2	9 1	7 7	7 4	7 5	7 6	7 6	7 4
13	11 0	11 3	11 9	9 10	8 7	10 2	10 8	9 7	9 4	9 5	7 10	8 4	8 6	8 1	9 0	7 6	7 3	7 4	7 5	7 6	7 3
14	11 0	11 2	11 8	9 0½	8 6	10 2	10 8	9 6	9 4	9 5	7 10	8 3	8 6	8 1	9 0	7 6	7 3	7 4	7 7	7 6	7 3
15	11 0	11 1	11 7	9 6	8 5	10 2	10 8	9 6	9 3	9 3	7 9	8 2	8 5	8 1	9 0	7 6	7 2	7 4	7 7	7 5½	7 2
16	11 0	11 0	11 6	9 5	8 4	10 2	10 8	9 4	9 2	9 3	7 9	7 10	8 4	7 11	8 10	7 5	7 2	7 3	7 7	7 3½	7 1
17	10 10	10 1	11 6	9 4	8 4	10 1	10 7	9 2	9 0	9 0	7 8	8 0	8 3	7 10	8 9	7 6	7 2	7 3	7 5	7 2½	7 0
18	10 9	10 9	11 6	9 3	8 3	10 1	10 7	9 0	8 10	9 0	7 7	8 0	8 3	7 10	8 9	7 4	7 1	7 2	7 4	7 1½	7 0
19	10 8	10 7	11 4	9 3	8 2	10 0	10 6	9 0	8 10	8 11	7 6	8 1	8 2	7 9	8 8	7 3	7 1	7 2	7 4	7 0½	6 11
20	10 6½	10 4	11 2	9 3½	8 1	9 10	10 4	9 0	8 10	8 11	7 6	8 1	8 2	7 8	8 7	7 3	7 1	7 2	7 2	7 0	6 10
21	10 6	10 4	11 2	9 3	7 5	9 10	10 4	9 2	8 10	8 10	7 5	8 0	8 3	7 8	8 7	7 4	7 0	7 1	7 1	7 0	6 9
22	10 7	10 4½	11 3	9 1	8 2	9 10	10 4	9 3	8 11	8 10	7 5	7 10	8 1	7 7	8 6	7 5	6 11	7 1	7 0	6 11	6 8
23	10 6	10 3	11 2	9 0	8 1	9 10	10 4	9 4	8 11	8 10	7 5	7 10	8 0	7 6	8 5	7 5	6 10	7 0	6 11	6 10	6 8
24	10 7½	10 3	11 2	8 6	8 1	9 10	10 4	9 3	8 11	8 7	7 6	7 7	8 0	7 6	8 5	7 4	6 10	7 0	7 0	6 10	6 7
25	10 5½	10 3	11 2	8 10	8 1	9 10	10 4	9 1	8 9	8 7	7 5	7 6	8 0	7 5	8 4	7 3	6 11	7 0	7 1	6 9½	6 7
26	10 4	10 3	11 0	8 10	8 1	9 9	10 3	9 1	8 9	8 5	7 5	7 5	7 11	7 4	8 3	7 2	7 0	6 11	7 1	6 8	6 6
27	10 4	10 1	11 0	8 6	8 0	9 9	10 3	9 1	8 9	9 5	7 5	7 4	7 10	7 4	8 2	7 0	7 1	6 11	7 0	6 7½	6 5
28	10 4	10 0	11 0	8 8	7 11	9 8	10 2	9 1	8 9	8 4	7 4	7 3	7 9	7 4	8 2	6 11	6 11	6 10	6 11	6 6	6 3
29	10 3½	9 11	10 10	8 5	7 10	9 8	10 2	9 1	8 8	8 3	7 1	7 3	7 9	7 3	8 1	6 9	6 10	6 9	6 10	6 4½	6 2
30	10 3	9 10	10 8	8 4	7 9	9 8	10 2	9 0	8 8	8 3	7 0	7 2	7 8	7 3	8 1	6 9	6 9	6 8	6 9	6 3	6 1

Appendix A.
No. 3.

Heights of Water on
Lock Sills,
May, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.	
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
May 1	10	0	9	9	10	7	8	2	7	8	9	6	10	0	9	0
2	9	11	9	8	10	6	8	0	7	7	9	5	9	11	8	11
3	9	10½	9	7	10	6	8	0	7	7	9	4	9	10	8	11
4	9	9	9	5	10	4	7	10	7	6	9	2	9	8	8	10
5	9	9	9	4	10	4	7	9	7	5	9	1	9	7	8	9
6	9	7½	9	3	10	3	7	8	7	4	9	0	9	6	8	8
7	9	6	9	2	10	2	7	8	7	4	8	10	9	4	8	7
8	9	6	9	1	10	2	7	8	7	3	8	10	9	4	8	6
9	9	5	9	0	10	0	7	8	7	3	8	6	9	0	8	5
10	9	3	8	10	9	10	7	7	7	2	8	6	9	0	8	4
11	9	2	8	7	9	9	7	7	7	2	8	4	8	10	8	3
12	9	0	8	7	9	8	7	7	7	2	8	4	8	10	8	2
13	9	0	8	6	9	8	7	3	7	2	8	4	8	10	8	0
14	9	0	8	6	9	8	7	3	7	2	8	2	8	8	7	11
15	8	11	8	5	9	8	7	2	7	0	8	2	8	8	7	10
16	8	10	8	4	9	7	7	1	6	11	8	2	8	8	7	7
17	8	10	8	3	9	6	7	0	6	11	8	2	8	8	7	5
18	8	10	8	2	9	6	6	11	6	11	8	2	8	8	7	2
19	8	9½	8	2	9	5	6	10	6	11	8	2	8	8	7	1
20	8	9	8	2	9	5	6	9	6	10	6	2	8	8	7	0
21	8	7½	8	0	9	5	6	9	6	9	8	2	8	8	7	0
22	8	6	8	0	9	4	6	9	6	9	8	2	8	8	7	0
23	8	6	7	11	9	4	6	3	6	7	8	2	8	8	7	0
24	8	5½	7	10	9	3	6	6	6	7	8	2	8	8	7	0
25	8	5	7	9	9	3	6	6	6	7	8	1	8	7	7	0
26	8	4½	7	8	9	2	6	6	6	7	8	0	8	6	7	0
27	8	4	7	7	9	0	6	5	6	7	8	0	8	6	6	11
28	8	4	7	7	8	11	6	4	6	7	8	0	8	6	6	11
29	8	4	7	6	8	11	6	3	6	6	7	11	8	5	6	11
30	8	3½	7	6	8	11	6	3	6	5	7	11	8	5	6	11
31	8	3	7	5	8	10	6	0	6	5	7	10	8	4	6	11

1836.	Shannon Bridge.		Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
May 1	8	7	8	1	7	0	7	2	7	7	7	3	8	1	6	10	6	8	6	7	6	8	6	2	6	0
2	8	6	7	10	7	0	7	2	7	6	7	2	8	0	6	10	6	7	6	7	6	7	6	1	6	0
3	8	6	7	10	7	0	7	1	7	5	7	2	8	0	6	10	6	6	6	5	6	5	6	0	5	11
4	8	5	7	10	6	9	7	0	7	4	7	1	7	11	6	9	6	5	6	3	6	2	5	10½	5	11
5	8	4	7	9	6	9	7	0	7	4	7	1	7	11	6	8	6	4	6	3	6	2	5	9	5	11
6	8	3	7	9	6	9	6	11	7	3	7	0	7	10	6	7	6	3	6	3	6	2	5	8	5	10
7	8	2	7	8	6	7	6	11	7	2	6	10	7	9	6	6	6	2	6	2	6	0	5	6	5	10
8	8	1	7	7	6	5	6	10	7	2	6	9	7	8	6	5	6	1	6	1	5	10	5	5	5	11
9	8	0	7	6	6	6	6	9	7	1	6	9	7	8	6	3	6	0	6	0	5	8	5	4	5	11
10	7	11	7	6	6	6	6	8	7	0	6	8	7	7	6	2	5	11	5	11	5	6	5	3	5	10
11	7	10	7	5	6	3	6	8	7	0	6	8	7	7	6	1	5	10	5	9	5	4	5	2	5	9
12	7	9	7	5	6	3	6	7	6	11	6	7	7	6	6	0	5	9	5	8	5	4	5	1½	5	8
13	7	7	7	5	6	3	6	7	6	10	6	7	7	6	5	11	5	8	5	7	5	3	5	1	5	9
14	7	6	7	2	6	3	6	6	6	9	6	6	7	5	5	10	5	7	5	6	5	3	5	0	5	10
15	7	5	6	10	6	1	6	5	6	8	6	6	7	5	5	9	5	7	5	5	5	2	4	11	5	9
16	7	3	6	10	6	1	6	4	6	7	6	5	7	4	5	9	5	6	5	4	5	2	4	10	5	10
17	7	1	6	10	6	1	6	3	6	6	6	4	7	3	5	8	5	5	5	3	5	2	4	9½	5	10
18	6	10	6	10	6	0	6	1	6	5	6	3	7	2	5	7	5	4	5	3	5	1	4	8½	5	9
19	6	10	6	10	6	0	6	0	6	5	6	2	7	1	5	7	5	3	5	2	4	11	4	7½	5	8
20	6	9	6	8	5	10	5	11	6	4	6	1	6	11	5	7	5	3	5	1	4	9	4	6½	5	7
21	6	9	6	8	5	10	5	10	6	4	6	0	6	10	5	6	5	2	5	1	4	8	4	6	5	7
22	6	8	6	7	5	9	5	10	6	4	5	11	6	9	5	6	5	2	5	0	4	7	4	5½	5	7
23	6	8	6	7	5	9	5	9	6	3	5	10	6	8	5	5	5	1	5	0	4	6	4	5½	5	6
24	6	8	6	7	5	9	5	8	6	3	5	10	6	7	5	4	5	0	4	11	4	5	4	4½	5	6
25	6	8	6	7	5	7	5	8	6	3	5	10	6	7	5	4	5	0	4	10	4	4	4	4	5	6
26	6	7	6	7	5	6	5	7	6	2	5	9	6	7	5	3	5	0	4	9	4	4	4	3	5	6
27	6	7	6	6	5	6	5	7	6	1	5	8	6	7	5	3	4	11	4	8	4	3	4	2½	5	6
28	6	7	6	6	5	6	5	6	6	0	5	7	6	6	5	2	4	11	4	8	4	3	4	1½	5	5
29	6	7	6	3	5	6	5	5	5	11	5	6	6	6	5	2	4	10	4	8	4	2	4	1	5	5
30	6	7	6	3	5	6	5	5	5	11	5	5	6	6	5	1	4	9	4	8	4	2	4	1	5	5
31	6	7	6	3	5	6	5	4	5	10	5	3	6	5	5	1	4	9	4	7	4	2	4	0	5	5

Appendix A. No. 3.

Heights of Water on Lock Sills, June, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
June 1	8	2	7	5	8	9	6	0	6	4	7	8	8	2
2	8	2	7	4	8	8	6	1	6	3	7	8	8	2
3	7	11	7	3	8	8	6	5	6	2	7	8	8	2
4	7	11	7	3	8	7	6	5	6	2	7	8	8	2
5	7	11	7	3	8	7	6	4	6	3	7	8	8	2
6	7	10½	7	2	8	7	6	4	6	3	7	8	8	2
7	7	11	7	2	8	6	6	1	6	3	7	8	8	2
8	7	11	7	1	8	6	6	3	6	3	7	8	8	2
9	7	11	7	0	8	6	6	6	6	3	7	8	8	2
10	7	10	7	0	8	5	6	5	6	3	7	9	8	3
11	7	10	6	11	8	5	6	1	6	4	7	9	8	3
12	7	10½	6	11	8	5	6	1	6	3	7	9	8	3
13	7	10	6	11	8	5	6	0	6	3	7	8	8	2
14	7	11	6	11	8	5	6	0	6	3	7	7	8	1
15	7	10½	6	11	8	5	5	11	6	3	7	7	8	1
16	7	9½	6	11	8	5	6	0	6	2	7	6	8	0
17	7	10	6	11	8	5	5	11	6	2	7	6	8	0
18	7	9½	6	10	8	5	5	10	6	2	7	6	8	0
19	7	9	6	10	8	5	5	10	6	2	7	4	7	10
20	7	9	6	10	8	4	5	10	6	0	7	4	7	10
21	7	8½	6	10	8	4	5	10	6	0	7	4	7	10
22	7	7½	6	10	8	2	5	10	6	0	7	4	7	10
23	7	4½	6	10	7	11	5	10	5	11	7	4	7	10
24	7	8¼	6	9	7	11	5	10	5	11	7	3	7	9
25	7	8	6	9	7	10½	5	10	5	11	7	3	7	9
26	7	8	6	8	7	10	5	9	5	11	7	3	7	9
27	7	8¼	6	8	7	10	5	9	5	10	7	2	7	8
28	7	7½	6	8	7	10	5	9	5	11	7	2	7	8
29	7	8	6	7	7	9½	5	8	5	10	7	1	7	7
30	7	7	6	7	7	9½	5	8	6	0	7	0	7	6

1836.	Shannon Bridge.				Athlone.				Lanesborough.			
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
June 1	6	11	6	7	6	2	5	3	5	3	5	9
2	6	10	6	7	6	2	5	3	5	3	5	9
3	6	9	6	6	6	2	5	2	5	3	5	9
4	6	9	6	6	6	2	5	2	5	2	5	8
5	6	9	6	6	6	2	5	1	5	2	5	8
6	6	9	6	6	6	2	5	1	5	2	5	8
7	6	9	6	6	6	2	5	1	5	3	5	10
8	6	9	6	7	6	2	5	1	5	3	5	10
9	6	10	6	7	6	2	5	1	5	2	5	9
10	6	11	6	8	6	2	5	1	5	2	5	9
11	6	11	6	8	6	2	5	1	5	3	5	10
12	6	10	6	7	6	2	5	1	5	3	5	10
13	6	10	6	7	6	2	5	1	5	4	5	10
14	6	10	6	7	6	2	5	1	5	4	5	10
15	6	9	6	6	6	2	5	1	5	3	5	10
16	6	9	6	6	6	2	5	0	5	2	5	9
17	6	8	6	5	6	2	5	0	5	1	5	8
18	6	8	6	5	6	0	4	11	5	0	5	8
19	6	8	6	5	6	0	4	11	5	0	5	8
20	6	8	6	5	5	10	4	11	5	0	5	7
21	6	8	6	5	5	10	4	11	5	0	5	7
22	6	9	6	6	5	10	4	11	5	1	5	6
23	6	9	6	6	5	10	4	9	5	0	5	7
24	6	9	6	6	5	10	4	9	4	11	5	8
25	6	8	6	5	5	10	4	9	4	11	5	8
26	6	8	6	5	5	10	4	9	4	10	5	8
27	6	8	6	5	5	10	4	9	4	10	4	7
28	6	8	6	5	5	10	4	9	4	10	5	7
29	6	7	6	4	5	10	4	9	4	10	5	6
30	6	7	6	4	5	10	4	9	4	10	5	6

1836.	Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
June 1	5	2	6	5	5	0	4	8	4	7	4	2	3	11½	5	5
2	5	2	6	5	4	11	4	8	4	7	4	2	3	10	5	4
3	5	2	6	5	4	9	4	7	4	7	4	2	3	10	5	4
4	5	1	6	4	4	10	4	8	4	7	4	2	3	10	5	4
5	5	1	6	4	5	0	4	9	4	7	4	3	3	10	5	5
6	5	1	6	4	5	0	4	9	4	7	4	3	4	0	5	5
7	5	1	6	4	5	0	4	8	4	7	4	3	3	11½	5	5
8	5	1	6	4	5	0	4	8	4	7	4	2	4	0½	5	5
9	5	1	6	4	5	1	4	8	4	8	4	2	4	1	5	4
10	5	1	6	4	5	1	4	8	4	9	4	3	4	2	5	4
11	5	2	6	5	5	2	4	9	4	9	4	4	4	2	5	5
12	5	2	6	5	5	1	4	9	4	8	4	4	4	1	5	5
13	5	2	6	5	5	1	4	8	4	8	4	4	4	1	5	5
14	5	2	6	5	5	1	4	8	4	8	4	3	4	0	5	5
15	5	2	6	5	5	1	4	8	4	8	4	3	4	0	5	4
16	5	2	6	5	5	0	4	8	4	7	4	2	3	11½	5	4
17	5	2	6	5	5	0	4	8	4	7	4	2	3	11	5	5
18	5	1	6	5	5	0	4	8	4	6	4	2	3	11	5	5
19	5	1	6	5	5	0	4	7	4	6	4	2	3	11	5	6
20	5	1	6	5	4	11	4	7	4	6	4	2	3	11	5	5
21	5	2	6	6	4	11	4	7	4	7	4	2	3	11	5	6
22	5	2	6	6	4	11	4	7	4	7	4	2	4	0	5	6
23	5	2	6	6	4	11	4	7	4	7	4	3	4	0	5	7
24	5	2	6	6	4	11	4	7	4	7	4	4	4	2	5	7
25	5	2	6	6	4	10	4	7	4	7	4	5	4	2	5	7
26	5	2	6	6	4	10	4	6	4	7	4	6	4	2	5	8
27	5	1	6	5	4	10	4	6	4	7	4	6	4	2½	5	8
28	5	1	6	5	4	11	4	6	4	8	4	7	4	3	5	9
29	5	0	6	4	4	11	4	6	4	8	4	7	4	4	5	9
30	5	0	6	4	4	11	4	7	4	8	4	7	4	4	5	10

Appendix A.
No. 3.

Heights of Water on Lock Sills, July, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July 1	7	6½	6	7	7	9	5	8	6	0	6	11	7	5	6	4	6	2
2	7	6	6	6	7	9½	5	8	5	11	6	11	7	5	6	2	6	0
3	7	6½	6	6	7	9½	5	8	5	11	6	10	7	4	6	0	5	10
4	7	6	6	6	7	9	5	8	5	9	6	10	7	4	5	10	5	9
5	7	6	6	6	7	9	5	8	5	9	6	9	7	3	5	10	5	9
6	7	6	6	6	7	9	5	7½	5	9	6	9	7	3	5	10	5	9
7	7	6½	6	6	7	9½	5	8	5	9	6	8	7	2	5	10	5	9
8	7	6	6	5	7	9½	5	6	5	9	6	8	7	2	5	11	5	10
9	7	6	6	5	7	8½	5	8	5	8	6	8	7	2	5	9	5	7
10	7	5½	6	5	7	8	5	8	5	7	6	7	7	1	5	6	5	6
11	7	5	6	5	7	8	5	8	5	7	6	6	7	0	5	6	5	5
12	7	4	6	4	7	8	5	7½	5	6	6	6	7	0	5	0	5	6
13	7	3	6	4	7	8	5	7½	5	7	6	6	7	0	5	0	6	5
14	7	4	6	4	7	8	5	6	5	8	6	6	7	0	5	0	6	5
15	7	3	6	4	7	8½	5	7	5	8	6	6	7	0	5	0	5	5
16	7	3½	6	4	7	8	5	8	5	8	6	6	7	0	5	6	5	5
17	7	3½	6	4	7	8	5	8	5	9	6	6	7	0	5	4	5	4
18	7	4	6	4	7	7½	5	5	5	8	6	6	7	0	5	4	5	5
19	7	4	6	4	7	9	5	4	5	8	6	5	6	11	5	4	5	5
20	7	3	6	4	7	9	5	4	5	8	6	5	6	11	5	8	5	6
21	7	3	6	4	7	9	5	4	5	9	6	7	7	1	5	8	5	6
22	7	3	6	4	7	8½	5	4	5	9	6	7	7	1	5	8	5	7
23	7	3	6	4	7	8½	5	4	5	9	6	7	7	1	5	9	5	7
24	7	3½	6	4	7	8	5	4	5	9	6	7	7	1	5	7	5	6
25	7	3½	6	4	7	8	5	4	5	8	6	7	7	1	5	7	5	5
26	7	4	6	4	7	8	5	4	5	8	6	8	7	2	5	8	5	6
27	7	4½	6	4	7	8½	5	8	5	9	6	10	7	4	5	8	5	7
28	7	5	6	8	7	10	6	4	6	4	7	6	8	0	6	1	6	0
29	8	6	7	7	8	3½	6	8	7	1	8	0	8	6	6	6	6	5
30	8	4	7	6	8	6	6	5	7	6	8	6	9	0	7	7	7	4
31	8	3½	7	6	8	8	6	8	7	7	8	6	9	0	8	0	7	8

1836.	Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July 1	5	10	4	8	4	10	5	6	5	0	6	4	4	11	4	7	4	8	4	9	4	5	5	10
2	5	10	4	9	4	11	5	5	5	0	6	3	5	0	4	8	4	9	4	10	4	5½	5	9
3	5	10	4	8	4	10	5	6	5	0	6	3	5	1	4	9	4	9	4	11	4	6	5	8
4	5	10	4	8	4	10	5	7	5	0	6	3	5	2	4	9	4	9	4	11	4	7	5	8
5	5	7	4	9	4	10	5	8	5	0	6	3	5	2	4	9	4	9	4	11	4	6	5	7
6	5	7	4	9	4	10	5	8	5	0	6	4	5	2	4	9	4	9	4	11	4	6½	5	7
7	5	6	4	9	4	9	5	7	5	0	6	4	5	2	4	9	4	9	4	11	4	6	5	7
8	5	5	4	9	4	9	5	7	5	0	6	4	5	1	4	9	4	9	4	11	4	6	5	8
9	5	4	4	9	4	9	5	7	5	0	6	4	5	1	4	9	4	9	4	11	4	6	5	8
10	5	3	4	9	4	8	5	6	5	0	6	4	5	0	4	9	4	9	4	11	4	6	5	9
11	5	3	4	9	4	8	5	6	5	0	6	4	5	1	4	9	4	9	4	11	4	6	5	9
12	5	3	4	9	4	9	5	7	5	1	6	5	5	2	4	9	4	9	5	1	4	9½	5	10
13	5	4	4	9	4	10	5	8	5	1	6	5	5	4	4	9	4	10	5	1	4	9½	5	10
14	5	4	4	9	4	10	5	9	5	1	6	5	5	6	4	10	4	10	5	2	4	9½	5	11
15	5	7	4	9	4	10	5	10	5	2	6	6	5	9	4	10	4	10	5	3	4	10	5	11
16	5	7	4	9	4	10	5	10	5	2	6	6	5	10	4	10	4	11	5	4	4	9	6	0
17	5	6	4	9	4	9	5	10	5	3	6	7	5	10	4	10	4	11	5	4	4	9	6	0
18	5	5	4	9	4	9	5	11	5	3	6	7	5	8	4	10	4	11	5	4	4	9	6	1
19	5	5	4	9	4	9	5	11	5	3	6	7	5	6	4	10	4	11	5	5	4	10½	6	2
20	5	5	4	9	4	10	5	11	5	3	6	7	5	6	4	10	5	0	5	6	4	11	6	3
21	5	5	4	9	4	10	5	11	5	4	6	8	5	7	4	11	5	1	5	8	4	11	6	4
22	5	5	4	9	4	9	6	0	5	4	6	8	5	7	5	0	5	2	5	10	5	0	6	5
23	5	5	4	9	4	8	6	0	5	4	6	8	5	8	5	1	5	3	6	1	5	0½	6	6
24	5	4	4	9	4	9	6	0	5	4	6	8	5	9	-	-	5	3	6	0	5	6	6	7
25	5	4	4	9	4	11	6	1	5	6	6	10	5	10	-	-	5	4	6	4	5	7½	6	8
26	5	4	4	9	4	11	6	2	5	7	6	11	5	11	-	-	5	4	6	8	5	8½	6	9
27	5	5	4	10	5	1	6	3	5	7	6	11	6	2	-	-	5	6	6	8	5	10	6	11
28	5	6	5	0	5	3	6	8	5	8	7	0	6	5	-	-	5	7	6	9	6	0	7	2
29	6	5	5	3	5	3	7	2	5	9	7	1	6	8	-	-	5	10	6	10	6	4	7	5
30	7	1	5	5	5	4	7	7	5	11	7	3	6	11	-	-	5	11	6	10	6	6	7	7
31	7	4	5	0	5	6	7	11	5	11	7	4	7	3	6	3	6	5	6	11	6	6½	7	8

Appendix A. No. 3.

Heights of Water on Lock Sills, August, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina. Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Aug. 1	8	5	7	8	8	9	6	11	7	8	8	7	9	1
2	8	6½	7	11	9	0	6	10	7	8	8	6	9	0
3	8	8	8	1	9	2	7	0	7	7	8	6	9	0
4	8	9	8	2	9	4	7	0	7	8	8	4	8	10
5	8	9½	8	3	9	4	7	1	7	7	8	4	8	10
6	8	10	8	3	9	5	7	1½	7	6	8	3	8	9
7	8	10	8	2	9	5	7	1	7	5	8	2	8	8
8	8	9½	8	2	9	5	7	1	7	4	8	1	8	7
9	8	9	8	2	9	4	7	1	7	3	8	1	8	7
10	8	9	8	2	9	4	7	1	7	3	8	0	8	6
11	8	8½	8	1	9	4	7	0	7	2	7	11	8	5
12	8	8	8	1	9	4	7	0	7	1	7	11	8	5
13	8	7	8	1	9	3	6	10	7	1	7	10	8	4
14	8	6½	8	0	9	3	6	10	6	11	7	10	8	4
15	8	7	7	11	9	3	6	9¼	6	11	7	9	8	3
16	8	6½	7	11	9	2	6	9	6	11	7	8	8	2
17	8	5½	7	11	9	0	6	9	6	10	7	7	8	1
18	8	5½	7	10	9	0	7	0	6	9	7	6	8	0
19	8	4	7	9	9	0	6	8	6	9	7	6	8	0
20	8	5	7	8	9	0	6	8½	6	10	7	6	8	0
21	8	4½	7	8	9	0	6	9	6	10	7	6	8	0
22	8	4	7	6	8	11	6	7	6	8	7	6	8	0
23	8	4	7	6	9	0	6	4	6	9	7	6	8	0
24	8	5	7	6	8	11	6	7¼	6	9	7	5	7	11
25	8	4½	7	5	8	9	6	7	6	9	7	5	7	11
26	8	4	7	6	8	9	6	5½	6	8	7	5	7	11
27	8	4½	7	9	9	0	6	5½	6	8	7	5	7	11
28	8	4½	7	9	8	11	6	10	6	10	7	6	7	11
29	8	4	7	9	8	11	6	8	6	10	7	6	8	0
30	8	4	7	9	8	11	6	9	6	9	7	6	8	0
31	8	4½	7	9	8	11	6	8½	6	9	7	6	8	0

1836.	Shannon Bridge. Low. Sill.		Shannon Bridge. Up. Sill.		Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.		Cloondrah. Low. Sill.		Cloondrah. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Aug. 1	8	1	7	7	7	4	5	8	5	8	8	0	6	11	7	10
2	8	3	7	8	7	4	5	11	5	10	8	0	7	6	8	0
3	8	4	7	8	7	5	5	11	5	11	7	10	7	7	8	1
4	8	5	7	8	7	5	6	0	5	11	7	8	7	7	8	1
5	8	4	7	8	7	4	6	0	6	0	7	7	7	6	8	0
6	8	3	7	7	7	4	6	0	6	1	7	6	7	5	7	11
7	8	1	7	6	7	5	6	0	6	2	7	5	7	4	7	10
8	7	11	7	5	7	4	6	3	6	3	7	4	7	4	7	10
9	7	10	7	5	7	4	6	3	6	3	7	4	7	4	7	9
10	7	10	7	5	7	4	6	3	6	2	7	3	7	3	7	8
11	7	10	7	4	7	4	6	3	6	2	7	2	7	2	7	7
12	7	9	7	4	7	3	6	3	6	2	7	1	7	2	7	7
13	7	8	7	3	7	3	6	3	6	2	7	0	7	1	7	6
14	7	7	7	2	7	2	6	3	6	1	7	0	7	1	7	6
15	7	7	7	2	7	0	6	3	6	1	6	11	7	0	7	5
16	7	7	7	1	7	0	6	3	6	1	6	10	7	0	7	5
17	7	6	7	0	7	0	6	3	6	0	6	10	7	0	7	5
18	7	6	7	0	7	0	6	1	6	1	6	9	7	1	7	6
19	7	6	7	0	7	0	6	1	6	0	6	8	7	1	7	6
20	7	6	7	0	6	11	6	1	5	11	6	7	7	1	7	6
21	7	6	7	0	6	10	6	0	5	11	6	7	7	0	7	5
22	7	6	7	0	6	10	6	0	5	10	6	6	7	0	7	5
23	7	0	7	0	6	10	6	0	5	10	6	6	6	11	7	4
24	6	6	7	0	6	10	6	0	5	8	6	5	6	11	7	4
25	6	6	6	11	6	10	5	9	5	9	6	5	6	11	7	4
26	6	5	6	11	6	10	5	9	5	9	6	4	6	10	7	3
27	6	5	6	11	6	10	5	9	5	9	6	4	6	9	7	1
28	6	5	6	11	6	10	5	9	5	10	6	4	6	9	7	1
29	6	6	7	0	6	10	5	9	5	10	6	5	6	7	6	11
30	6	6	7	0	6	10	5	9	5	10	6	5	6	7	6	11
31	6	6	7	0	6	10	5	9	5	11	6	5	6	6	6	10

1836.	Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Aug. 1	7	6	6	7	6	6	6	11	6	8	7	9
2	7	5	6	7	6	7	6	10	6	7	7	10
3	7	4	6	7	6	8	6	8	6	6	7	10
4	7	3	6	8	6	8	6	7	6	5	7	9
5	7	3	6	8	6	7	6	6	6	4	7	8
6	7	2	6	7	6	7	6	4	6	0	7	7
7	7	1	6	7	6	6	6	4	6	0	7	6
8	7	0	6	6	6	5	6	5	5	11	7	4
9	7	0	6	6	-	-	-	-	5	10½	7	2
10	6	11	6	5	-	-	-	-	5	9	7	0
11	6	10	6	4	-	-	-	-	5	8½	6	10
12	6	9	6	3	-	-	-	-	5	8	6	8
13	6	8	6	2	-	-	-	-	5	7	6	6
14	6	6	6	1	-	-	-	-	5	6	6	5
15	6	6	6	0	-	-	-	-	5	4	6	4
16	6	5	5	9	-	-	-	-	5	3	6	3
17	6	4	5	10	-	-	-	-	5	2	6	2
18	6	4	5	10	-	-	-	-	5	1½	6	2
19	6	3	5	8	-	-	-	-	5	1	6	1
20	6	2	5	8	-	-	-	-	5	1	6	1
21	6	2	5	7	-	-	-	-	5	0	6	0
22	6	1	5	5	-	-	-	-	4	11	6	0
23	5	11	5	4	-	-	-	-	4	11	5	11
24	5	10	5	4	-	-	-	-	4	10	5	11
25	5	9	5	3	-	-	-	-	4	10	5	10
26	5	9	5	3	-	-	-	-	4	9	5	10
27	5	8	5	3	-	-	-	-	4	9	5	9
28	5	7	5	2	-	-	-	-	4	9½	5	9
29	5	7	5	2	-	-	-	-	4	10	5	10
30	5	8	5	1	-	-	-	-	4	11	5	11
31	5	8	5	1	-	-	-	-	5	0	6	0

Appendix A. No. 3.

Heights of Water on Lock Sills, September, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina. Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Sept. 1	8	5	7	10	8	11½	6	9	6	10	7	8	8	2
2	8	5½	7	11	9	0	6	8	6	10	7	8	8	2
3	8	6	8	0	8	11	6	10	6	10	7	11	8	5
4	9	0	8	5½	9	5	6	8	7	2	8	1	8	7
5	9	0	8	4½	9	6	7	2	7	5	8	4	8	10
6	9	0½	8	8½	9	8	7	3	7	7	8	6	9	0
7	9	1½	8	8½	9	9	7	6	7	8	8	8	9	2
8	9	8	9	5	9	11	7	8	7	10	8	10	9	4
9	9	8	9	5	10	2	7	9	7	11	9	0	9	6
10	9	9½	9	6	10	5	8	1	8	2	9	3	9	9
11	9	9	9	7	10	5	8	3	8	3	9	3	9	9
12	9	10	9	7	10	6	8	3	8	1	9	1	9	7
13	9	10½	9	7	10	7	8	2	8	0	9	0	9	6
14	9	10	9	6	10	6½	8	1	7	11	8	9	9	3
15	9	9	9	6	10	5½	8	1	7	9	8	9	9	3
16	9	8½	9	5	10	5½	8	0	7	8	8	9	9	3
17	9	8	9	4	10	5	7	10	7	7	8	9	9	3
18	9	7	9	3	10	4	7	10	7	6	8	8	9	2
19	9	6	9	2	10	3	7	10	7	6	8	6	9	0
20	9	5½	9	1	10	2	7	8	7	5	8	5	8	11
21	9	5½	9	0	10	1	7	7	7	4	8	4	8	10
22	9	5	9	0	10	0	7	8	7	4	8	2	8	8
23	9	5½	9	1	9	10	7	9	7	3	8	4	8	10
24	9	5	9	0	9	10	7	9	7	4	8	5	8	11
25	9	4½	8	11	9	11	7	9	7	5	8	5	8	11
26	9	3½	8	11	10	0	7	8	7	7	8	6	9	0
27	9	3½	8	10	10	0	7	8	7	6	8	5	8	11
28	9	3	8	10	10	0	7	8	7	6	8	5	8	11
29	9	3	8	9	10	0	7	7	7	6	8	5	8	11
30	9	3	8	9	9	11	7	7	7	6	8	5	8	11

1836.	Shannon Bridge. Low. Sill.		Shannon Bridge. Up. Sill.		Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Sept. 1	7	7	7	1	6	10	5	9	5	11	6	5
2	7	8	7	3	6	10	5	9	6	0	6	6
3	7	11	7	3	6	10	5	10	6	0	6	6
4	7	11	7	6	6	10	5	10	6	1	6	7
5	8	0	7	7	7	7	6	0	6	2	6	8
6	8	1	7	8	7	7	6	1	6	2	6	10
7	8	1	7	8	7	10	6	3	6	3	6	10
8	8	5	8	3	8	1	6	3	6	3	6	11
9	8	8	8	6	8	2	6	4	6	3	6	11
10	8	10	8	7	8	4	6	5	6	4	7	0
11	8	10	8	7	8	5	6	6	6	4	7	1
12	8	9	8	6	8	5	6	6	6	5	6	2
13	8	8	8	5	8	2	6	6	6	5	7	3
14	8	7	8	3	8	1	6	6	6	5	7	4
15	8	7	8	2	7	11	6	6	6	5	7	7
16	8	6	8	2	7	11	6	6	6	6	7	5
17	8	6	8	2	7	10	6	6	6	6	7	6
18	8	5	8	1	7	10	6	9	6	7	7	6
19	8	4	8	0	7	11	6	9	6	7	7	6
20	8	3	7	11	7	10	6	9	6	7	7	6
21	8	1	7	9	7	10	6	9	6	6	7	5
22	8	0	7	7	7	10	6	11	6	7	7	5
23	8	1	7	8	7	10	6	11	6	6	7	5
24	8	1	7	9	7	11	7	5	6	7	7	5
25	8	2	7	10	7	11	7	5	6	7	7	5
26	8	3	7	10	8	1	7	5	6	8	7	5
27	8	4	7	11	7	10	7	4	6	8	7	5
28	8	4	7	11	7	10	7	4	6	7	7	4
29	8	3	7	11	7	9	7	4	6	7	7	4
30	8	3	7	10	7	9	7	4	6	7	7	4

1836.	Cloondrah. Low. Sill.		Cloondrah. Up. Sill.		Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Sept. 1	6	3	6	9	5	9	5	2	-	-	-	-	5	1	6	2
2	6	2	6	9	5	9	3	3	-	-	-	-	5	3	6	7
3	6	2	6	9	5	11	5	5	-	-	-	-	5	10	6	10
4	7	0	7	6	6	6	5	8	-	-	-	-	6	7	7	1
5	7	6	8	0	7	0	5	11	-	-	-	-	6	8½	7	5
6	7	6	8	0	7	0	6	2	-	-	-	-	6	9	7	5
7	7	5	7	11	7	2	6	5	-	-	-	-	6	8	7	4
8	7	5	7	11	7	3	6	8	-	-	-	-	6	8	7	3
9	7	5	7	11	7	4	6	10	-	-	-	-	6	10	7	2
10	7	4	7	10	7	5	6	11	-	-	-	-	6	9	7	1
11	7	4	7	10	.	5	7	0	-	-	-	-	6	9	6	11
12	7	4	7	10	7	5	7	0	-	-	-	-	6	8½	6	8
13	7	4	7	10	7	4	7	0	6	7	6	8	6	8	6	3
14	7	4	7	10	7	4	6	11	6	7	6	7	6	7	5	11
15	7	4	7	10	7	3	6	11	6	7	6	6	6	6	5	9
16	7	3	7	9	7	2	6	11	6	6	6	5	6	5	5	9
17	7	3	7	9	7	1	6	10	6	4	6	4	6	2½	5	8
18	7	3	7	9	7	0	6	9	6	4	6	3	6	1	5	8
19	7	3	7	9	7	0	6	8	6	3	6	3	6	0	5	9
20	7	2	7	8	6	11	6	7	6	3	6	2	5	10½	5	9
21	7	2	7	8	6	11	6	6	6	2	6	1	5	10	5	11
22	7	1	7	7	6	10	6	5	6	1	6	0	5	9½	6	2
23	7	1	7	7	6	11	6	7	6	3	6	2	5	2	6	5
24	7	1	7	7	6	11	6	7	6	3	6	3	6	4	6	7
25	7	2	7	8	6	11	6	7	6	3	6	4	6	4	6	6
26	7	1	7	8	6	10	6	7	6	3	6	5	6	4	6	8
27	7	1	7	8	6	10	6	7	6	3	6	5	6	5	6	10
28	7	0	7	7	6	10	6	7	6	3	6	6	6	6	7	1
29	7	0	7	7	6	10	6	7	6	3	6	6	6	6½	7	0
30	7	0	7	7	6	10	6	7	6	3	6	7	6	7	6	11

Appendix A. No. 3.

Heights of Water on Lock Sills, October, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Oct. 1	9	3½	9	1	9	11	7	9	7	5	8	6	9	0	8	4	7	11	7	9	7	4	6	7	7	4	7	2	7	9	7	0	6	9	6	9	7	2	7	8	7	0
2	9	3½	9	1	10	0	7	9	7	7	8	8	9	2	8	4	7	11	7	11	7	5	6	7	7	4	7	5	8	0	7	5	6	11	6	7	7	6	7	9	7	2
3	9	4	9	0	10	1	7	9	7	8	8	9	9	3	8	6	8	1	7	11	7	5	6	7	7	8	7	9	8	5	7	7	7	2	6	9	7	10	7	11	7	5
4	9	5	9	0	10	1	7	9	7	9	8	10	9	4	8	7	8	2	8	1	7	6	6	9	8	3	7	10	8	6	7	10	7	5	6	10	7	10	8	0	7	8
5	9	5	9	0	10	0	7	9	7	9	8	11½	9	5½	8	7	8	3	8	2	7	6	6	10	8	3	8	0	8	7	7	11	7	6	6	11	7	10	8	0	7	9
6	9	4	9	0	10	0	7	9	7	9	8	11	9	5	8	8	8	4	8	4	7	6	6	10	8	3	8	0	8	7	8	0	7	7	7	1	7	8	7	10½	7	11
7	9	5	9	0	10	1	7	9	7	9	8	10	9	4	8	9	8	5	8	7	7	6	6	11	8	4	8	0	8	7	8	1	7	8	7	3	7	7	7	10	8	0
8	9	5	8	11	10	2	7	11	7	11	8	10	9	4	8	10	8	6	8	9	7	7	7	1	8	6	8	1	8	8	8	2	7	9	7	5	7	9	8	2	8	1
9	9	5½	8	10	10	2	8	1	8	0	8	10	9	4	8	11	8	7	8	10	7	9	7	2	8	6	8	1	8	8	8	3	7	9	7	7	8	0	8	2	8	2
10	9	6	9	0	10	2	8	1	8	0	8	11	9	5	9	0	8	8	8	10	7	9	7	3	8	7	8	1	8	8	8	5	7	9	7	7	8	0	8	2	8	3
11	9	6½	9	1	10	2	8	2	8	2	9	0	9	6	9	1	8	9	8	11	7	11	7	4	8	7	8	1	8	8	8	4	7	9	7	7	7	10	8	1	8	3
12	9	8	9	2	10	3	8	2½	8	2	9	1	9	7	9	2	8	11	8	11	8	1	7	5	8	7	8	1	8	8	8	4	7	9	7	7	7	9	7	11	8	1
13	10	0	9	8	10	8	8	6	8	5	9	2	9	8	9	3	9	0	8	11	8	2	7	5	8	8	8	2	8	9	8	4	7	9	7	7	7	8	7	10½	7	11
14	10	0½	9	11	10	11	8	9	8	8	9	3	9	9	9	8	9	3	9	7	8	3	7	5	8	8	8	2	8	9	8	3	7	9	7	7	7	7	7	10	7	10
15	10	3	10	1	11	0	8	9	8	8	9	4	9	10	9	9	9	4	9	7	8	3	7	6	8	8	8	2	8	9	8	3	7	9	7	6	7	7	7	8½	7	9
16	10	4	10	3	11	1	8	11	8	8	9	6	10	0	9	9	9	4	9	7	8	3	7	6	8	8	8	2	8	9	8	3	7	9	7	6	7	7	7	7½	7	8
17	10	5½	10	3	11	2	8	11	8	8	9	6	10	0	9	8	9	3	9	7	8	5	7	7	8	7	8	3	8	10	8	2	7	8	7	6	7	6	7	0	7	8
18	10	5½	10	3	11	2	9	0½	8	7	9	6	10	0	9	8	9	4	9	7	8	6	7	7	8	7	8	3	8	10	8	1	7	8	7	6	7	6	7	8	7	7
19	10	6	10	4	11	3	9	1	8	7	9	6	10	0	9	8	9	4	9	7	8	6	7	8	8	7	8	3	8	10	8	1	7	8	7	6	7	6	7	7	7	7
20	10	7	10	5	11	4	9	0	8	6	9	6	10	0	9	9	9	5	9	7	8	6	7	8	8	8	8	5	8	10	7	11	7	7	7	6	7	5	7	9	7	7
21	10	9	10	8	11	5	9	4	8	7	9	8	10	2	9	11	9	6	9	7	8	6	7	8	7	7	8	5	8	10	8	1	7	9	7	5	7	4	7	10	7	8
22	10	11	10	10	11	7	9	8	8	11	9	9	10	3	10	0	9	7	9	10	8	6	7	9	9	0	8	6	8	9	8	5	7	11	7	5	7	8	8	1½	7	9
23	11	0	11	1	11	8½	9	8	9	0	9	10	10	4	10	2	9	9	9	10	8	6	7	10	9	4	8	6	8	9	8	10	8	0	7	6	7	8	8	4	7	9
24	11	2	11	2	11	9½	9	10	9	1	10	0	10	6	10	3	9	10	10	1	8	9	8	1	9	6	8	5	8	8	8	9	8	0	7	7	7	10	8	2	7	8
25	11	3	11	3	11	9½	9	11	9	2	10	0	10	6	10	4	10	0	10	1	8	9	8	2	9	5	8	5	8	7	8	8	7	11	7	9	7	11	7	11	7	7
26	11	2½	11	4	11	10	9	8	9	1	10	0	10	6	10	4	10	0	10	2	8	11	8	2	9	4	8	5	8	7	8	6	7	9	7	9	8	0	7	10	7	7
27	11	2½	11	4	11	11	9	9	9	3	9	11	10	5	10	3	9	11	10	2	8	10	8	3	9	3	8	5	8	7	8	4	7	9	7	9	7	4	7	9	7	6
28	11	3	11	4	11	11	9	9	9	11	9	10	10	4	11	3	9	11	10	2	8	10	8	4	9	2	8	5	8	6	8	3	7	9	7	9	7	10	7	9½	7	5
29	11	4	11	3	11	11	9	8	8	10	9	10	10	4	10	3	9	10	9	10	8	10	8	4	9	1	8	4	8	5	8	2	7	9	7	5	7	8	7	8	7	5
30	11	5	11	3	11	10	9	8	8	9	9	10	10	4	10	3	9	10	9	10	8	10	8	3	8	11	8	4	8	5	8	1	7	8	7	5	7	7	7	8	7	4
31	11	1	11	2	11	9	9	8	8	8	9	9	10	3	10	1	9	9	9	8	8	10	8	3	8	10	8	3	8	4	8	0	7	7	7	4	7	5	7	8½	7	4

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Appendix A.
No. 3.

Heights of Water on Lock Sills, November, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Nov. 1	11	0	11	1	11	8	9	7	8	7	9	8	10	2	10	1	9	9	9	8	8	11
2	11	0	11	0	11	8	9	7	8	7	9	8	10	2	10	0	9	8	9	8	8	11
3	10	11	10	11	11	8	9	8	8	7	9	8	10	2	9	11	9	7	9	8	8	11
4	10	10½	11	0	11	8	9	6	8	5	9	8	10	2	9	10	9	6	9	8	8	11
5	11	1	11	1	11	8	9	6	8	6	9	8	10	2	9	10	9	6	9	8	9	0
6	11	0½	11	1	11	8	9	6	8	6	9	8	10	2	9	10	9	6	9	8	9	0
7	11	0	10	11	11	7	9	6	8	9	9	8	10	2	9	9	9	5	9	8	9	0
8	11	0	10	11	11	6	9	6	8	9	9	8	10	2	9	10	9	6	9	8	9	0
9	11	2	11	2	11	4	9	6	8	9	9	8	10	2	10	1	9	8	9	9	9	0
10	11	3	11	4	11	9	9	9	8	10	9	10	10	4	10	0	9	8	9	11	9	0
11	11	6	11	8	12	0	9	9	9	0	9	11	10	5	10	1	9	10	10	0	9	2
12	11	3½	11	9	12	0	9	10	9	2	10	0	10	6	10	2	9	11	10	1	8	11
13	11	6	11	10	12	2	9	11	9	5	10	2	10	8	10	4	10	1	10	2	9	2
14	11	7½	11	11	12	5	10	4	9	6	10	3	10	9	10	6	10	3	10	5	9	4
15	11	8	12	1	12	5	10	7	9	6	10	5	10	11	10	8	10	4	10	7	9	5
16	11	9	12	0	12	5	10	8	9	6	10	6	11	0	10	8	10	4	10	7	9	6
17	11	10	12	2	12	5	10	8	9	4	10	6	11	0	10	7	10	4	10	7	9	6
18	12	1½	12	4	12	6	10	8	9	4	10	6	11	0	10	8	10	4	10	7	9	8
19	12	2	12	6	12	8	10	8	9	5	10	5	10	11	10	6	10	5	10	7	9	8
20	12	0½	12	5	12	8	10	7	9	4	10	4	10	10	10	5	10	5	10	7	9	8
21	12	0½	12	6	12	7	10	6½	9	3	10	4	10	10	10	5	10	4	10	7	9	8
22	12	1	12	6	12	8	10	6	9	3	10	4	10	10	10	5	10	5	10	8	9	8
23	12	3	12	7	12	8	10	5	9	5	10	6	11	0	10	8	10	6	10	9	9	9
24	12	3	12	9	12	9	10	6	9	6	10	6	11	0	10	8	10	7	10	9	10	1
25	12	6	12	10	12	10	10	8	9	7	10	6	11	0	10	8	10	7	10	10	10	1
26	12	6½	12	11	13	0	10	10	9	6	10	6	11	6	10	8	10	6	10	10	10	1
27	12	4	12	11	12	9	11	3	9	5	10	6	11	0	10	8	10	4	10	10	10	1
28	12	4	13	0	12	10	11	4	9	4	10	6	11	0	10	8	10	2	10	10	10	1
29	12	4	13	0	13	0	11	3	9	5	10	6	11	0	10	9	10	3	10	10	10	1
30	12	4½	13	0	13	0	10	11	9	6	10	6	11	0	10	9	10	3	10	10	10	1

1836.	Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Nov. 1	8	3	8	10	8	3	8	4	7	11	7	7	7	6	7	6	7	5½	7	3
2	8	3	8	10	8	3	8	4	7	10	7	7	7	5	7	5	7	4½	7	4
3	8	3	8	9	8	3	8	4	7	10	7	7	7	3	7	4	7	4½	7	5
4	8	2	8	10	8	4	8	5	7	10	7	7	7	2	7	2	7	3	7	6
5	8	2	8	11	8	4	8	5	7	11	7	6	7	2	7	4	7	3½	7	7
6	8	2	8	10	8	4	8	5	7	11	7	7	7	3	7	6	7	4	7	8
7	8	3	8	11	8	4	8	5	8	0	7	10	7	3	7	7	7	9½	7	9
8	8	3	8	11	8	4	8	5	8	1	7	10	7	4	7	8	7	9	7	10
9	8	4	9	1	8	5	8	6	8	3	7	10	7	5	7	10	8	1	7	11
10	8	4	9	3	8	7	8	8	8	5	7	10	7	7	8	0	8	5	7	11
11	8	4	9	3	8	8	8	9	8	7	7	11	7	7	8	0	8	6	8	0
12	8	6	9	5	8	8	8	9	8	9	8	0	7	8	8	4	8	9	8	0
13	8	7	9	9	8	10	8	11	9	0	8	2	7	9	8	6	8	10	8	1
14	8	9	9	11	8	10	8	11	9	0	8	2	7	11	8	8	9	0	8	1
15	8	10	10	0	8	10	8	11	9	1	8	3	8	1	8	8	9	1	8	2
16	8	11	10	0	8	10	8	11	9	2	8	3	8	3	8	7	9	0	8	2
17	8	11	9	11	8	10	8	11	9	3	8	4	8	3	8	8	8	10½	8	1
18	8	11	10	0	8	10	8	11	9	3	8	4	8	3	8	9	8	11	8	0
19	9	0	10	0	9	0	9	1	9	2	8	5	8	3	8	9	8	11	8	0
20	9	1	10	1	9	0	9	1	9	2	8	5	8	2	8	10	8	11½	7	11
21	9	1	10	1	9	0	9	1	9	2	8	5	8	2	8	9	8	9½	7	11
22	9	1	10	0	9	0	9	1	9	3	8	6	8	1	8	8	8	9	8	0
23	9	2	10	1	9	0	9	1	9	3	8	6	8	1	8	8	9	0	8	0
24	9	2	10	2	9	0	9	1	9	4	8	6	8	3	8	8	8	11	8	1
25	9	3	10	2	8	11	9	0	9	4	8	6	8	3	8	7	8	9½	8	2
26	9	4	10	2	8	11	9	2	9	3	8	5	8	3	8	6	8	8	8	2
27	9	4	10	3	8	11	9	2	9	2	8	5	8	3	8	5	8	8	8	3
28	9	4	10	3	8	11	9	2	9	0	8	4	8	2	8	5	8	8½	8	4
29	9	5	10	3	8	11	9	2	9	0	8	4	8	1	8	5	8	7½	8	4
30	9	5	10	2	8	11	9	2	9	0	8	4	8	1	8	6	8	8	8	5

Appendix A.
No. 3.

Heights of Water on Lock Sills, December, 1836.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1836.	Errina. Up. Sill. Ft.	In.	Cussaan. Low. Sill. Ft.	In.	Killaloe. Up. Sill. Ft.	In.	Hamilton. Low. Sill. Ft.	In.	Hamilton. Up. Sill. Ft.	In.	Banagher. Low. Sill. Ft.	In.	Banagher. Up. Sill. Ft.	In.	Shannon Bridge. Low. Sill. Ft.	In.	Shannon Bridge. Up. Sill. Ft.	In.	Athlone. Low. Sill. Ft.	In.	Athlone. Up. Sill. Ft.	In.
Dec. 1	12	4½	13	0	13	0	10	11	9	5	10	6	11	0	10	10	10	6	10	10	10	1
2	12	4½	13	2	12	10½	11	0	9	4	10	6	11	0	10	10	10	6	10	10	10	1
3	12	6	13	4	13	1	11	6	9	7	10	10	11	4	11	2	10	10	11	3	10	3
4	12	9½	13	4	13	5	11	9	9	10	11	2	11	8	11	4	11	1	11	5	10	4
5	12	10	13	7	13	5½	11	10	10	0	11	5	11	11	11	5	11	2	11	7	10	6
6	13	0½	13	9	13	7½	12	8	10	1	11	6	12	0	11	7	11	3	11	7	10	6
7	13	3½	14	0	13	10	12	10	10	1	11	9	12	3	11	9	11	4	11	7	10	9
8	13	4	14	0	13	10	12	10	10	2	11	10	12	4	11	10	11	5	11	9	10	10
9	13	7	14	3	13	11	12	3	10	4	12	0	12	6	11	11	11	5	11	9	11	0
10	13	9	14	5	14	1	12	4	10	4	11	10	12	4	11	11	11	6	11	9	11	1
11	13	8	14	5	14	2	12	3	10	2	11	8	12	2	11	11	11	5	11	9	11	1
12	13	6½	14	6	13	11	12	3	10	1	11	7	12	1	11	10	11	4	11	9	11	2
13	13	7½	14	6	14	0	12	4	10	2	11	9	12	3	11	11	11	7	12	4	11	6
14	13	11	14	7	14	2	12	4	10	4	12	0	12	6	12	1	11	11	12	2	11	9
15	13	9	14	7	14	1	12	6	10	4	12	0	12	6	12	0	11	10	12	2	12	0
16	13	11	14	8	14	2	12	6	10	4	12	0	12	6	12	0	11	10	12	4	12	2
17	13	10	14	8	14	2	12	6½	10	4	12	0	12	6	12	0	11	9	12	6	12	2
18	14	0½	14	8	14	4	12	6	10	5	12	0	12	6	11	11	11	10	12	7	12	2
19	14	0	14	9	14	2	12	8	10	5	12	1	12	7	12	2	11	11	12	7	12	4
20	14	0½	14	9	14	4	12	8	10	5	12	1	12	7	12	4	12	1	12	7	12	4
21	14	0½	14	10	14	4	12	8	10	5	12	2	12	8	12	3	12	0	12	4	12	3
22	14	0	14	8	14	4	12	6	10	4	12	0	12	6	12	2	11	11	12	4	12	3
23	14	0	14	6	14	4	12	3	10	3	11	10	12	4	12	3	11	11	12	1	12	3
24	13	11	14	4	14	4	12	2½	10	3	11	8	12	2	12	3	12	0	12	1	12	0
25	13	9	14	3	14	3	12	0	10	2	11	6	12	0	12	3	12	0	12	0	11	9
26	13	7	13	11	14	2	11	6	10	1	11	4	11	10	12	2	11	11	11	7	11	9
27	13	5	13	7	13	9	11	6	10	1	11	2	11	8	12	1	11	10	11	7	11	9
28	13	0	13	5	13	6	11	6	10	1	11	0	11	6	12	0	11	8	11	4	11	6
29	12	9	13	3	13	5	-	-	-	-	10	11	11	4	11	11	11	6	11	4	11	6
30	12	8	13	3	13	2	-	-	-	-	10	8	11	2	11	10	11	5	11	4	10	11
31	12	6½	13	2	13	0	-	-	-	-	10	6	11	0	11	4	11	0	11	4	10	11

1836.	Lanesborough. Low. Sill. Ft.	In.	Lanesborough. Up. Sill. Ft.	In.	Cloondrah. Low. Sill. Ft.	In.	Cloondrah. Up. Sill. Ft.	In.	Rooskey. Low. Sill Ft.	In.	Rooskey. Up. Sill. Ft.	In.	Jamestown. Low. Sill. Ft.	In.	Jamestown. Up. Sill. Ft.	In.	Battle Bridge. Lower Sill. Ft.	In.	Drumleague. Upper Sill. Ft.	In.
Dec. 1	9	5	10	2	8	11	9	2	9	2	8	4	8	1	8	6	8	8	8	5
2	9	5	10	3	9	0	9	3	9	3	8	5	8	2	8	7	8	8	8	7
3	9	6	10	4	9	1	9	4	9	4	8	5	8	1	8	8	8	9	8	8
4	9	7	10	5	9	6	9	8	9	6	8	5	8	2	8	10	8	10	8	10
5	9	8	10	7	9	1	10	0	9	7	8	6	8	4	9	0	9	7	8	11
6	9	8	10	9	10	2	10	5	9	8	8	7	8	5	9	2	9	8	9	1
7	9	8	10	11	10	2	10	5	9	8	8	9	8	4	9	4	9	9	9	3
8	9	9	11	1	10	2	10	5	9	10	8	11	8	5	9	7	9	11	9	5
9	9	11	11	3	10	5	10	8	10	0	9	5	8	9	9	10	10	4	9	5
10	10	1	11	4	10	5	10	8	10	2	9	5	8	10	10	0	10	5	9	6
11	10	2	11	5	10	5	10	8	10	5	9	5	9	1	10	0	10	6½	9	8
12	10	6	11	7	10	5	10	8	10	5	9	5	9	3	10	1	10	6½	9	9
13	10	8	11	10	10	5	10	8	10	8	9	5	9	6	10	4	11	4	9	11
14	10	10	12	0	10	6	10	9	10	10	9	6	9	5	10	5	11	4½	9	11
15	11	0	12	1	10	5	10	9	10	10	9	7	9	7	10	6	11	4½	9	11
16	11	0	12	1	10	5	10	8	10	10	9	8	9	6	10	5	10	6	9	10
17	11	2	12	3	10	5	10	8	10	9	9	7	9	5	10	2	10	6	9	9
18	11	3	12	4	10	5	10	8	10	8	9	7	9	4	9	10	10	3	9	8
19	11	4	12	5	10	4	10	7	10	8	9	5	9	3	9	8	10	1	9	6
20	11	4	12	5	10	2	10	5	10	5	9	4	9	3	9	8	9	11	9	4
21	11	3	12	4	10	2	10	5	10	2	9	2	9	2	9	5	9	6	9	1
22	11	3	12	3	10	2	10	4	10	0	9	1	9	0	9	2	9	4	8	11
23	11	2	12	2	10	0	10	1	9	10	8	9	8	10	9	2	9	1	8	9
24	11	1	12	0	9	0	9	11	9	7	8	8	8	8	8	11	8	10	8	6
25	11	0	11	10	9	0	9	11	9	4	8	7	8	5	8	10	8	10	8	4
26	10	10	11	9	9	0	9	10	8	10	8	5	8	5	8	10	8	6	8	3
27	10	10	11	8	9	0	9	7	8	6	7	11	8	3	8	8	8	0	8	0
28	10	8	11	6	9	0	9	7	8	3	7	9	7	8	8	4	7	9	7	10
29	10	4	11	4	8	11	9	5	8	3	7	8	7	3	7	5	7	6	7	8
30	10	2	11	0	8	11	9	5	8	2	7	7	7	3	7	4	7	3½	7	7
31	10	0	10	10	8	10	9	3	8	2	7	7	7	4	7	0	7	1	7	6

Appendix A.
No. 3.

Heights of Water on Lock Sills, January, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Jan. 1	12	5	-	-	12	11	-	-	-	-	10	6	11	0	11	0	10	9
2	12	3	-	-	12	10	10	8	9	3	10	4	10	10	9	10	10	6
3	12	1	-	-	12	8	10	6½	9	2	10	2	10	8	9	8	9	8
4	12	0	-	-	12	6	10	4	9	1	10	1	10	7	9	6	9	6
5	11	11	-	-	12	5	10	3	9	0	10	0	10	6	9	3	9	3
6	11	10	-	-	12	3	10	3	9	0	10	0	10	6	9	6	9	7
7	11	9	-	-	12	3	10	4	9	0	9	11	10	5	9	9	9	11
8	11	8	-	-	12	3	10	4	8	11	9	10	10	4	10	1	10	1
9	11	7	-	-	12	3	10	4	9	0	9	10	10	4	10	0	10	0
10	12	0	-	-	12	3	10	0	9	1	9	11	10	5	9	11	9	11
11	11	11	-	-	12	4	10	2¼	9	2	10	0	10	6	9	11	9	11
12	11	9	-	-	12	4	10	2	9	2	10	0	10	6	9	11	10	0
13	12	0	-	-	12	6	10	4	9	3	10	1	10	7	9	11	9	11
14	12	1	-	-	12	6	10	4	9	4	10	2	10	8	10	0	10	1
15	12	0	-	-	12	6	10	4	9	4	10	2	10	8	10	4	10	1
16	11	11	-	-	12	6	10	3	9	4	10	1	10	7	10	3	10	0
17	11	10½	-	-	12	6	10	4	9	2	10	0	10	6	10	1	9	10
18	11	10	-	-	12	6	10	4	9	2	10	0	10	6	10	0	9	8
19	11	10	-	-	12	4	10	3	9	0	9	11	10	5	9	10	9	6
20	11	9	-	-	12	4	10	3	8	11	9	10	10	4	9	9	9	5
21	11	7½	-	-	12	4	10	3	8	11	9	9	10	3	9	9	9	5
22	11	5½	-	-	12	3	10	2½	8	11	9	9	10	3	9	10	9	6
23	11	7	-	-	12	3	10	0½	8	10	9	8	10	2	9	10	9	8
24	11	7½	-	-	12	1	9	10	8	10	9	7	10	1	9	10	9	8
25	11	7	-	-	12	1	9	4	8	10	9	6	10	0	9	4	9	6
26	11	6½	-	-	12	0	9	4½	8	10	9	6	10	0	9	9	9	5
27	11	5	-	-	12	0	9	4	8	9	9	4	9	10	9	0	9	4
28	11	4	-	-	11	11	9	4	8	9	9	4	9	10	8	11	9	4
29	11	2	-	-	11	11	9	4	8	6	9	3	9	9	8	11	9	3
30	11	1½	-	-	11	8	9	4	8	5	9	2	9	8	8	11	9	3
31	11	1	-	-	11	7	9	4	8	6	9	1	9	7	8	10	9	2

1837.	Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Jan. 1	11	9	10	4	9	9	10	8	8	10	9	2	7	10	7	6	7	3	6	10	6	10	7	6
2	11	9	10	4	9	8	10	6	8	10	9	2	7	10	7	6	7	2	6	9	6	7	7	5
3	11	7	10	3	9	6	10	0	8	10	9	2	7	9	7	5	7	0	6	8	6	7	7	6
4	11	7	10	1	9	3	9	8	8	9	9	1	7	8	7	4	6	10	6	7	6	7	7	6
5	11	7	9	11	9	0	9	6	8	9	9	1	7	7	7	2	6	7	6	5	6	6	7	7
6	11	7	9	9	9	0	9	6	8	9	9	1	7	7	7	2	6	6	6	4	6	6½	7	9
7	10	4	9	9	8	11	9	5	8	9	9	1	7	7	7	2	6	6	6	4	7	8	7	11
8	10	2	9	6	8	10	9	4	8	8	9	0	7	8	7	2	6	7	6	5	6	9	8	3
9	10	2	9	6	8	9	9	4	8	8	9	0	7	8	7	2	6	8	6	6	6	10	8	5
10	10	2	9	6	8	9	9	4	8	7	8	11	7	8	7	2	6	9	6	7	6	11	8	6
11	10	2	9	6	8	8	9	4	8	7	8	11	7	10	7	3	5	9	6	7	6	11½	8	6
12	10	2	9	5	8	8	9	3	8	6	8	10	7	11	7	4	6	0	6	10	7	2	8	6
13	10	2	9	5	8	8	9	5	8	6	8	10	8	1	7	5	6	11	7	2	7	8	8	5
14	10	2	9	5	8	9	9	6	8	5	8	9	8	4	7	7	7	8	8	1	7	9	8	4
15	10	2	9	5	8	10	9	6	8	4	8	8	8	7	7	9	7	7	7	3	7	8	8	3
16	10	2	9	5	8	10	9	6	8	4	8	8	8	5	7	9	7	7	7	4	7	6½	8	1
17	10	2	9	5	8	10	9	5	8	3	8	7	8	3	7	8	7	7	7	5	7	5	7	11
18	10	1	9	3	8	10	9	4	8	3	8	7	8	1	7	7	7	7	7	5	7	4	7	10
19	10	1	9	3	8	9	9	4	8	3	8	7	8	0	7	6	7	7	7	4	7	1½	7	8
20	10	1	9	2	8	8	9	3	8	2	8	6	7	11	7	5	7	6	7	3	7	0½	7	7
21	10	1	9	1	8	7	9	2	8	2	8	6	7	11	7	5	7	5	7	2	6	10½	7	6
22	10	0	9	1	8	7	9	1	8	1	8	5	7	10	7	5	7	4	7	2	6	10	7	5
23	9	10	9	1	8	7	9	0	8	1	8	5	7	10	7	4	7	4	6	11	6	11	7	5
24	9	9	9	0	8	6	9	0	8	0	8	4	7	9	7	4	7	0	7	8	6	10	7	4
25	9	9	9	0	8	5	8	11	8	0	8	4	7	8	7	3	7	0	6	8	6	9½	7	4
26	9	8	9	0	8	4	8	10	7	11	8	3	7	7	7	3	6	11	6	7	6	8	7	3
27	9	8	9	0	8	3	8	9	7	10	8	2	7	6	7	2	6	9	6	6	6	7	7	2
28	9	7	9	0	8	3	8	9	7	9	8	1	7	5	7	1	6	8	6	6	6	6	7	1
29	9	7	9	0	8	3	8	7	7	9	8	1	7	5	7	0	6	7	6	5	6	6	7	0
30	9	5	8	9	8	2	8	6	7	9	8	1	7	4	6	11	6	6	6	4	6	6½	6	11
31	9	3	8	9	8	2	8	6	7	8	8	0	7	3	6	11	6	5	6	3	6	4½	6	10

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Appendix A. No. 3.

Heights of Water on Lock Sills, February, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Feb. 1	11	0	-	-	11	6	9	3	8	5	9	0	9	6	8	10	9	1
2	10	11	-	-	11	6	9	3	8	4	9	0	9	6	8	10	9	0
3	10	9	-	-	11	6	9	2	8	4	9	1	9	7	8	11	9	0
4	10	8	-	-	11	4	9	2	8	2	9	2	9	8	8	10	8	11
5	10	8	-	-	11	4	9	2	8	2	9	2	9	8	8	10	8	11
6	10	7	-	-	11	3	9	2	8	2	9	3	9	9	9	0	9	1
7	10	6	-	-	11	3	9	1	8	3	9	3	9	9	9	2	9	0
8	10	7	-	-	11	3	9	3	8	6	9	4	9	10	9	3	9	0
9	10	7½	-	-	11	4	9	4	8	7	9	6	10	0	9	5	9	2
10	10	10	-	-	11	6	9	6½	8	8	9	8	10	2	9	9	9	5
11	11	2	-	-	11	9	9	9	9	0	9	9	10	3	9	11	9	7
12	11	6	-	-	12	2	9	10	9	4	9	10	10	4	10	2	9	9
13	11	9	-	-	12	6	10	5	9	6	10	0	10	6	10	9	10	3
14	12	2	-	-	12	8	10	8	9	7	10	2	10	8	10	11	10	7
15	12	2	-	-	12	8½	10	8	9	6	10	4	10	10	10	11	10	7
16	12	1½	-	-	12	9	10	11	9	6	10	5	10	11	10	10	10	6
17	12	3	-	-	12	9	11	3	9	4	10	6	11	0	10	8	10	9
18	12	4	12	6	12	9	11	3	9	6	10	10	11	4	11	0	11	0
19	12	4½	12	11	12	10	11	4	9	2	11	2	11	8	12	0	11	8
20	12	7	13	2	13	0	11	4	9	9	11	4	11	10	12	0	11	7
21	12	10	13	5	13	3	11	6	9	11	11	8	12	2	12	0	11	7
22	13	1	13	9	13	6	11	8	10	2	12	0	12	6	12	1	11	8
23	13	5½	14	0	13	8	12	6	10	3	12	3	12	9	12	1	11	9
24	13	7	14	3	13	11	12	6	10	4	12	3	12	9	12	1	11	9
25	13	10	14	4	14	1	12	6	10	5	12	2	12	8	11	11	11	8
26	13	8	14	4	14	1	12	3	10	2	12	2	12	8	10	10	11	6
27	13	8½	14	4	14	1	12	0	10	2	12	0	12	6	11	11	11	6
28	13	7	14	3	14	0	11	11	9	8	12	0	12	6	11	9	11	4

1837.	Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Feb. 1	9	3	8	9	8	0	8	5	7	8	8	0	7	3	6	11	6	4	6	2	6	3	6	10
2	9	2	8	9	7	11	8	4	7	8	8	0	7	3	6	10	6	5	6	2	6	1½	6	9
3	9	1	8	9	7	10	8	3	7	8	8	0	7	2	6	10	6	5	6	2	6	1	6	9
4	9	1	8	9	7	10	8	3	7	8	8	0	7	2	6	9	6	5	6	2	6	1	6	10
5	9	1	8	7	7	9	8	3	7	8	8	0	7	1	6	9	6	5	6	1	6	1	6	10
6	9	1	8	4	7	8	8	2	7	8	8	0	7	1	6	8	6	5	6	0	6	1	6	10
7	9	1	8	4	7	9	8	3	7	7	7	11	7	2	6	9	6	5	6	0	6	2	6	11
8	9	2	8	3	7	9	8	3	7	7	7	11	7	4	6	11	6	4	6	2	6	2½	6	11
9	9	2	8	3	7	10	8	4	7	6	7	10	7	5	7	1	6	4	6	2	6	4½	7	0
10	9	4	8	5	7	11	8	10	7	6	7	11	7	8	7	3	6	3	6	8	7	0	7	5
11	9	9	8	5	8	0	9	2	7	10	8	3	8	2	7	5	7	1	7	1	7	6	7	6
12	9	9	8	7	8	4	9	6	8	3	8	7	8	5	7	8	7	8	7	8	7	11	7	10
13	10	5	8	8	8	7	9	9	8	6	8	10	8	9	7	10	7	9	7	8	8	1	7	11
14	10	5	9	3	8	6	9	10	8	9	9	1	9	0	7	11	7	10	7	9	8	1	8	0
15	10	8	9	4	8	8	9	10	8	11	9	3	9	2	7	11	7	11	7	9	7	11	8	2
16	10	9	9	5	8	9	9	11	9	0	9	4	9	3	8	2	8	0	8	0	8	1½	8	4
17	10	8	9	6	8	11	10	1	9	0	9	4	9	4	8	3	8	1	8	2	8	5	8	5
18	10	10	9	5	9	1	10	2	9	10	9	6	9	5	8	4	8	2	8	2	8	7	8	7
19	11	1	9	11	9	4	10	3	9	10	9	6	9	6	8	6	8	2	8	3	8	9	8	11
20	11	2	10	0	9	6	10	5	9	11	9	7	9	7	8	7	8	4	8	5	9	0	9	1
21	11	7	10	4	9	7	10	7	9	11	9	7	9	8	8	8	8	6	8	6	9	0	9	0
22	11	7	10	4	9	8	10	9	10	0	9	8	9	8	8	8	8	7	8	8	8	11	8	11
23	11	7	10	9	9	9	10	10	10	1	9	9	9	9	8	9	8	7	8	8	9	4	8	9
24	11	8	10	10	9	10	10	0	10	1	9	9	9	10	8	9	8	6	8	9	9	5	8	7
25	11	8	10	11	9	11	11	1	10	1	9	9	9	10	8	10	8	7	8	8	9	3	8	5
26	11	8	10	11	9	11	11	2	10	0	9	8	9	11	8	10	8	6	8	7	9	2	8	4
27	11	7	11	0	10	0	11	1	9	11	9	7	9	9	8	10	8	6	8	7	8	10	8	4
28	11	6	11	0	10	0	11	1	9	11	9	7	9	6	8	7	8	3	8	5	8	8	8	3

Appendix A.
No. 3.

Heights of Water on Lock Sills, March, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina. Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.		Shannon Bridge. Low. Sill.		Shannon Bridge. U Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
March 1	13	6	14	1	13	10	11	10	9	7	11	11	12	5	11	5	10	11
2	13	4	13	11	13	8	11	9	9	5	11	10	12	4	11	1	10	8
3	13	1½	13	9	13	8	11	8	9	6	11	9	12	3	11	1	10	8
4	13	0	13	7	13	8	11	8	9	6	11	8	12	2	11	0	10	7
5	12	9½	13	0	13	6	11	7	9	5	11	6	12	0	10	11	10	6
6	12	8	13	2	13	4	11	7	9	5	11	2	11	8	10	9	10	6
7	12	6½	13	0	13	0	11	4	9	5	10	10	11	4	10	8	10	5
8	12	3	12	9	12	8	11	3	9	4	10	6	11	0	10	8	10	5
9	12	3½	12	5	12	6	11	3	9	2	9	4	10	10	10	7	10	4
10	12	3	12	6	12	6	11	5	9	1	9	3	10	9	10	6	10	3
11	12	0	12	4	12	7	11	6	9	1	9	3	10	9	10	5	10	2
12	11	11½	12	1½	12	8	11	6	9	1	9	2	10	8	10	1	10	0
13	11	10½	12	2	12	4	10	4	8	11	9	2	10	8	9	11	9	11
14	11	9	12	0½	12	3	10	2	8	11	9	1	10	7	9	10	9	10
15	11	8	11	11	12	2	10	0	8	10	9	0	10	6	9	9	9	9
16	11	7	11	9	12	1	9	8	8	9	8	10	10	4	9	8	9	8
17	11	6	11	7	12	0	9	8	8	8	9	9	10	3	9	7	9	7
18	11	4	11	5	11	11	9	8	8	7	9	8	10	2	9	5	9	6
19	11	1½	11	3	11	9½	9	7	8	6	9	6	10	0	9	4	9	5
20	11	0	11	1	11	8	9	6	8	5	9	5	9	11	9	3	9	4
21	10	11	11	0	11	6	9	3½	8	4	9	4	9	10	9	1	9	3
22	10	10	10	10	11	5	9	2	8	3	9	4	9	10	9	0	9	3
23	10	9½	10	8	11	4	9	1	8	3	9	3	9	9	8	11	9	2
24	10	6½	10	6	11	3	9	1	8	2	9	2	9	8	8	9	9	1
25	10	6	10	3	11	0	9	0	7	11	9	1	9	7	8	8	8	10
26	10	5	10	4	11	1	8	7	7	10	9	0	9	6	8	6	8	7
27	10	3	10	1	10	11	8	7	7	11	9	0	9	6	8	6	8	6
28	10	3	9	11	10	10	8	6	7	10	9	0	9	6	8	5	8	5
29	10	2	9	11	10	9	8	6	7	10	9	0	9	6	8	5	8	3
30	10	1½	9	10	10	8	8	5	7	9	9	0	9	6	8	4	8	2
31	10	0	9	9	10	6	8	5	7	8	8	11	9	5	8	3	8	2

1837.	Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.		Cloondrah. Low. Sill.		Cloondrah. Up Sill.		Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Low. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
March 1	11	6	11	0	10	3	11	0	9	10	9	6	9	3	8	4	8	2	8	4	8	5	8	3
2	11	4	10	11	10	2	10	10	9	7	9	4	9	2	8	3	8	1	8	3	8	2	8	2
3	11	3	10	11	10	1	10	9	9	7	9	4	9	1	8	1	7	11	7	0	7	10	8	2
4	11	1	10	10	10	0	10	7	9	6	9	3	8	11	8	0	7	9	7	9	7	8	8	1
5	10	11	10	8	9	11	10	5	9	6	9	3	8	8	7	11	7	8	7	6	7	6½	8	0
6	10	10	10	7	9	9	10	3	9	3	9	0	8	5	7	10	7	4	7	4	7	4	8	0
7	10	9	10	4	9	6	10	0	9	1	8	10	8	3	7	0	7	5	7	3	7	2	7	11
8	10	8	10	1	9	6	10	0	9	0	8	9	8	1	7	2	7	4	7	2	7	1½	7	10
9	10	8	10	0	9	4	9	10	9	1	8	9	7	11	7	4	6	6	7	0	6	10½	7	9
10	10	7	10	0	9	3	9	9	8	11	8	8	7	10	7	5	6	8	6	9	6	9	7	9
11	10	6	9	9	9	3	9	9	8	11	8	8	7	8	7	4	6	10	6	7	6	9	7	8
12	10	4	9	7	9	2	9	8	8	10	8	7	7	7	7	3	6	9	6	6	6	9½	7	7
13	10	2	9	6	9	0	9	6	8	10	8	7	7	6	7	2	6	7	6	5	6	6	7	7
14	9	11	9	6	8	11	9	5	8	10	8	7	7	5	7	0	6	6	6	5	6	4	7	6
15	9	10	9	4	8	8	9	3	8	10	8	7	7	4	6	11	6	5	6	4	6	3	7	5
16	9	9	9	3	8	7	9	1	8	9	8	6	7	3	6	10	6	4	6	2	6	1½	7	5
17	9	9	9	3	8	6	9	0	8	9	8	6	7	1	6	9	6	3	6	2	6	1	7	5
18	9	7	9	0	8	5	8	10	8	8	8	5	6	0	6	9	6	0	6	0	5	11	7	4
19	9	2	8	10	8	3	8	9	8	8	8	5	6	0	6	8	5	11	5	11	5	10	7	3
20	9	2	8	10	8	1	8	7	8	8	8	5	6	11	6	7	5	11	5	10	5	9	7	2
21	9	1	8	8	8	0	8	5	8	7	8	4	6	11	6	7	5	11	5	11	5	8	7	2
22	9	1	8	7	7	10	8	3	8	7	8	4	6	10	6	6	6	0	5	9	5	7½	7	1
23	8	11	8	4	7	7	8	0	8	6	8	3	6	9	6	5	6	0	5	9	5	6½	7	0
24	8	10	8	3	7	6	7	11	8	6	8	3	6	8	6	4	5	11	5	9	5	5½	6	11
25	8	9	8	1	7	6	7	11	8	5	8	2	6	7	6	3	5	10	5	9	5	5	6	10
26	8	7	8	0	7	5	7	10	8	5	8	2	6	6	6	2	5	10	5	8	5	5	6	10
27	8	6	8	0	7	4	7	9	8	5	8	2	6	5	6	2	5	9	5	8	5	4½	6	9
28	8	5	8	0	7	4	7	9	8	3	8	1	6	5	6	2	5	9	5	7	5	3½	6	8
29	8	4	8	0	7	3	7	8	8	2	8	1	6	4	6	2	5	9	5	7	5	4½	6	7
30	8	3	8	0	7	1	7	6	8	1	8	2	6	4	6	2	5	9	5	6	5	4½	6	6
31	8	1	7	9	7	0	7	6	8	1	8	2	6	3	6	1	5	9	5	6	5	4½	6	5

Appendix A. No. 3.

Heights of Water on Lock Sills, April, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina. Up. Sill. Ft.	Errina. Up. Sill. In.	Cussaan. Low. Sill. Ft.	Cussaan. Low. Sill. In.	Killaloe. Up. Sill. Ft.	Killaloe. Up. Sill. In.	Hamilton. Low. Sill. Ft.	Hamilton. Low. Sill. In.	Hamilton. Up. Sill. Ft.	Hamilton. Up. Sill. In.	Banagher. Low. Sill. Ft.	Banagher. Low. Sill. In.	Banagher. Up. Sill. Ft.	Banagher. Up. Sill. In.	Shannon Bridge. Low. Sill. Ft.	Shannon Bridge. Low. Sill. In.	Shannon Bridge. Up. Sill. Ft.	Shannon Bridge. Up. Sill. In.
April 1	9	11	9	7	10	6	8	4	7	8	8	10	9	4	8	2	8	1
2	9	10½	9	7	10	6	8	2	7	7	8	10	9	4	8	2	8	1
3	9	10	9	7	10	5	8	1	7	7	8	10	9	4	8	1	8	0
4	9	11	9	6	10	6	7	10½	7	6	8	9	9	3	8	1	8	0
5	9	10	9	6	10	4	7	10	7	8	8	9	9	3	8	0	7	11
6	9	9	9	6	10	3	7	11	7	8	8	9	9	3	8	0	7	11
7	9	9½	9	5	10	3	7	11	7	7	8	9	9	3	8	0	7	10
8	9	8	9	4	10	3	7	10	7	7	8	9	9	3	7	11	7	10
9	9	7	9	2	10	2	7	9	7	6	8	9	9	3	7	11	7	8
10	9	6	9	2	10	2	7	9	7	5	8	8	9	2	7	9	7	8
11	9	7	9	1	10	1	7	8	7	5	8	7	9	1	7	9	7	7
12	9	6	9	1	10	1	7	6	7	4	8	6	9	0	7	8	7	7
13	9	5½	9	1	10	1	7	6	7	4	8	6	9	0	7	8	7	7
14	9	4½	9	0	10	0	7	6	7	4	8	6	9	0	7	8	7	6
15	9	4	9	0	10	0	7	6½	7	5	8	6	9	0	7	7	7	6
16	9	4	9	0	10	0	7	5	7	4	8	4	8	10	7	7	7	5
17	9	3	8	10	9	10	7	5	7	4	8	4	8	10	7	5	7	4
18	9	2	8	9	9	9	7	5	7	3	8	4	8	10	7	4	7	4
19	9	1½	8	9	9	9	7	5	7	2	8	4	8	10	7	4	7	3
20	9	2	8	9	9	9	7	5	7	2	8	4	8	10	7	4	7	2
21	9	2	8	8	9	8	7	4	7	3	8	4	8	10	7	4	7	3
22	9	2	8	8½	9	8½	7	3	7	3	8	4	8	10	7	5	7	4
23	9	1	8	7	9	7	7	3	7	3	8	4	8	10	7	7	7	4
24	9	1¼	8	7	9	7	7	3	7	3	8	4	8	10	7	6	7	4
25	9	2½	8	7	9	7	7	3	7	3	8	2	8	8	7	6	7	3
26	9	0	8	6	9	6	7	4	7	3	8	1	8	7	7	7	7	5
27	9	0½	8	6½	9	6½	7	7	7	3	8	1	8	7	7	7	7	6
28	9	3	8	6	9	6	7	3	7	3	8	1	8	7	7	8	7	6
29	9	3½	8	5	9	5	7	4	7	3	8	2	8	8	7	8	7	7
30	9	0	8	5	9	5	7	6	7	4	8	2	8	8	7	9	7	7

1837.	Athlone. Low. Sill. Ft.	Athlone. Low. Sill. In.	Athlone. Up. Sill. Ft.	Athlone. Up. Sill. In.	Lanesborough. Low. Sill. Ft.	Lanesborough. Low. Sill. In.	Lanesborough. Up. Sill. Ft.	Lanesborough. Up. Sill. In.	Cloondrah. Low. Sill. Ft.	Cloondrah. Low. Sill. In.	Cloondrah. Up. Sill. Ft.	Cloondrah. Up. Sill. In.	Rooskey. Low. Sill. Ft.	Rooskey. Low. Sill. In.	Rooskey. Up. Sill. Ft.	Rooskey. Up. Sill. In.	Jamestown. Low. Sill. Ft.	Jamestown. Low. Sill. In.	Jamestown. Up. Sill. Ft.	Jamestown. Up. Sill. In.	Battle Bridge. Lower Sill. Ft.	Battle Bridge. Lower Sill. In.	Drumleague. Upper Sill. Ft.	Drumleague. Upper Sill. In.
April 1	7	11	7	9	7	0	7	6	8	0	8	1	6	2	6	1	5	8	5	5	5	4½	6	5
2	7	11	7	9	6	11	7	5	8	0	8	1	6	3	6	1	5	8	5	5	5	4½	6	4
3	7	11	7	9	6	11	7	5	8	0	8	1	6	3	6	1	5	8	5	5	5	5	6	4
4	7	9	7	8	6	10	7	5	7	11	8	2	6	4	6	2	5	8	5	5	5	6½	6	4
5	7	9	7	8	6	11	7	6	7	11	8	1	6	5	6	2	5	8	5	5	5	4½	6	5
6	7	9	7	8	6	10	7	6	7	10	8	0	6	5	6	1	5	8	5	5	5	4½	6	5
7	7	9	7	8	6	9	7	5	7	9	8	0	6	5	6	1	5	8	5	5	5	3½	6	4
8	7	9	7	8	6	9	7	5	7	8	8	1	6	5	6	1	5	8	5	5	5	3½	6	4
9	7	9	7	6	6	9	7	4	7	9	8	1	6	5	6	1	5	8	5	5	5	3½	6	3
10	7	9	7	6	6	8	7	4	7	9	8	1	6	5	6	1	5	8	5	4	5	3	6	3
11	7	7	7	5	6	8	7	4	7	8	8	0	6	5	6	0	5	6	5	4	5	3½	6	4
12	7	7	7	4	6	7	7	3	7	8	8	0	6	5	6	0	5	6	6	4	5	3½	6	4
13	7	6	7	4	6	7	7	3	7	7	7	11	6	4	6	0	5	6	5	4	5	3½	6	4
14	7	5	7	4	6	8	7	3	7	7	7	11	6	4	6	0	5	7	5	5	5	3	6	5
15	7	5	7	4	6	7	7	2	7	6	7	10	6	4	6	0	5	6	5	4	5	3	6	5
16	7	4	7	4	6	7	7	2	7	6	7	10	6	4	6	0	5	7	5	5	5	4	6	6
17	7	5	7	4	6	6	7	2	7	5	7	9	6	4	6	5	5	6	5	4	5	2½	6	6
18	7	4	7	3	6	5	7	2	7	5	7	9	6	4	5	11	5	5	5	3	5	3	6	7
19	7	4	7	2	6	4	7	1	7	4	7	9	6	3	5	11	5	5	5	3	5	2½	6	6
20	7	4	7	3	6	3	7	0	7	3	7	8	6	3	5	11	5	6	5	5	5	2½	6	6
21	7	2	7	2	6	4	7	1	7	3	7	8	6	3	5	11	5	7	5	7	5	9	6	5
22	7	2	7	1	6	5	7	1	7	2	7	7	6	3	5	11	5	8	5	8	5	9½	6	4
23	7	1	7	1	6	4	7	1	7	2	7	7	6	4	6	1	5	8	5	9	5	9	6	4
24	7	2	7	0	6	4	7	0	7	2	7	7	6	5	6	2	5	8	5	9	5	9	6	5
25	7	2	7	0	6	5	7	1	7	1	7	6	6	4	6	2	5	8	5	9	5	9	6	5
26	7	2	7	0	6	5	7	3	7	1	7	6	6	4	6	1	5	8	5	8	5	8	6	6
27	7	2	7	0	6	6	7	4	7	1	7	6	6	3	6	1	5	8	5	7	5	8	6	6
28	7	2	7	0	6	6	7	4	7	2	7	7	6	2	6	0	5	8	5	7	5	7½	6	7
29	7	2	7	0	6	5	7	3	7	2	7	7	6	0	5	11	5	8	5	8	5	7	6	7
30	7	2	7	0	6	6	7	4	7	2	7	7	6	2	6	1	5	9	5	8	6	0	6	8

Appendix A. No. 3.

Heights of Water on Lock Sills, May, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
May 1	9	2½	8	8½	9	8½	7	6	7	5	8	3	8	9	7	10	7	8
2	9	3	8	9	9	9	7	8	7	5	8	5	8	11	7	10	7	7
3	9	4	8	10½	9	10½	7	6	7	5	8	6	9	0	7	9	7	7
4	9	4	8	11	9	11	7	6	7	5	8	6	9	0	7	10	7	8
5	9	4½	8	11	9	11	7	6	7	4	8	6	9	0	7	9	7	7
6	9	4	8	11	9	11	7	6	7	4	8	7	9	1	7	8	7	5
7	9	2½	8	11	9	11	7	7	7	2	8	8	9	2	7	7	7	0
8	9	3	8	11	9	11	7	6	7	4	8	9	9	3	7	10	7	7
9	9	4	8	11	9	11	7	6	7	6	8	8	9	2	7	11	7	8
10	9	3½	8	11	9	11	7	7	7	6	8	7	9	1	7	11	7	8
11	9	2½	8	11½	9	11½	7	7	7	5	8	6	9	0	7	9	7	7
12	9	3½	9	0	10	0	7	7	7	4	8	4	8	10	7	8	7	5
13	9	3½	9	0	10	0	7	7	7	4	8	4	8	10	7	8	7	4
14	9	4	9	1	10	1	7	7	7	4	8	3	8	9	7	8	7	3
15	9	2½	9	0	10	0	7	5	7	3	8	3	8	9	7	7	7	2
16	9	2½	8	11	9	11	7	5	7	2	8	3	8	9	7	7	7	2
17	9	1½	8	9½	9	9½	7	5	7	2	8	3	8	9	7	6	7	1
18	9	2	8	9	9	9	7	5	7	2	8	2	8	8	7	4	7	0
19	9	1	8	8	9	8	7	4	7	1	8	1	8	7	7	3	7	1
20	9	0	8	8	9	8	7	3	7	0	8	0	8	6	7	2	7	0
21	9	0	8	7	9	7	6	10	6	11	8	0	8	6	7	2	7	0
22	8	10½	8	6	9	6	6	10	6	11	8	0	8	6	7	0	6	11
23	8	9	8	5½	9	5½	6	10	6	11	7	11	8	5	7	0	6	11
24	8	10	8	3	9	3	6	10	6	9	7	11	8	5	6	11	6	10
25	8	8½	8	3	9	3	6	10	6	9	7	10	8	4	6	11	6	10
26	8	7	8	3	9	3	6	10	6	9	7	9	8	3	6	11	6	10
27	8	7	8	3	9	3	6	10	6	9	7	9	8	3	6	10	6	9
28	8	7	8	2	9	2	6	10	6	9	7	9	8	3	6	9	6	8
29	8	6½	8	3	9	3	6	9	6	9	7	9	8	3	6	10	6	9
30	8	6½	8	3	9	3	6	9	6	9	7	9	8	3	6	10	6	9
31	8	7	8	3	9	3	6	9	6	9	7	9	8	3	6	9	6	9

1837.	Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
May 1	7	2	7	0	6	5	7	5	7	2	7	7	6	4	6	3	5	9	5	8	6	1½	6	8
2	7	4	7	0	6	6	7	6	7	3	7	8	6	6	6	4	5	11	5	10	6	1½	6	9
3	7	3	7	1	6	5	7	6	7	3	7	8	6	8	6	5	6	3	6	0	6	1½	6	9
4	7	5	7	1	6	5	7	5	7	2	7	8	6	10	6	6	6	3	6	2	6	1½	6	10
5	7	4	7	2	6	5	7	5	7	0	7	8	6	10	6	6	6	3	6	1	6	1½	6	10
6	7	3	7	1	6	4	7	5	6	11	7	7	6	10	6	5	6	1	6	1	6	1	6	11
7	7	3	7	1	6	4	7	4	6	10	7	6	6	10	6	5	6	0	6	0	5	11	6	11
8	7	5	7	3	6	4	7	4	6	10	7	6	6	9	6	5	6	0	5	7	5	9	6	11
9	7	5	7	3	6	5	7	5	6	10	7	6	6	9	6	4	5	10	5	11	5	8½	6	11
10	7	5	7	3	6	5	7	5	6	10	7	6	6	9	6	4	5	10	5	9	5	7½	6	10
11	7	5	7	2	6	5	7	5	6	9	7	5	6	8	6	3	5	8	5	7	5	7	6	10
12	7	5	7	3	6	4	7	4	6	9	7	5	6	7	6	3	5	9	5	7	5	6½	6	10
13	7	4	7	1	6	4	7	4	6	9	7	5	6	6	6	2	5	9	5	7	5	5½	6	9
14	7	4	7	1	6	3	7	3	6	8	7	5	6	5	6	2	5	8	5	6	5	4½	6	9
15	7	2	7	1	6	3	7	2	6	7	7	4	6	4	6	1	5	7	5	5	5	3	6	8
16	7	2	7	1	6	2	7	1	6	7	7	4	6	3	6	0	5	6	5	4	5	2½	6	7
17	7	2	7	1	6	2	7	0	6	7	7	4	6	2	5	11	5	5	5	4	5	1	6	7
18	7	0	7	1	6	2	6	11	6	6	7	4	6	2	5	11	5	4	5	3	5	0	6	7
19	7	0	7	1	6	2	6	10	6	6	7	4	6	1	5	9	5	4	5	2	4	11	6	6
20	6	11	7	1	6	1	6	10	6	5	7	3	6	0	5	9	5	3	5	1	4	10¼	6	5
21	6	10	7	0	6	1	6	9	6	5	7	3	5	11	5	8	5	2	5	0	4	9½	6	4
22	6	9	6	11	6	1	6	8	6	4	7	3	5	10	5	7	5	1	4	11	4	9	6	4
23	6	8	6	11	6	0	6	8	6	4	7	3	5	9	5	6	5	1	4	10	4	8½	6	3
24	6	8	6	9	6	1	6	8	6	4	7	3	5	8	5	5	5	0	4	9	4	8½	6	3
25	6	8	6	9	6	1	6	8	6	3	7	2	5	7	5	5	4	11	4	9	4	8	6	3
26	6	8	6	9	6	1	6	7	6	3	7	2	5	8	5	4	4	10	4	8	4	7½	6	2
27	6	8	6	9	6	1	6	7	6	3	7	2	6	9	5	4	4	10	4	8	4	7	6	2
28	6	8	6	9	5	11	6	7	6	2	7	2	5	9	5	3	4	10	4	8	4	7	6	1
29	6	8	6	9	5	10	6	6	6	2	7	2	5	8	5	4	4	9	4	8	4	7½	6	1
30	6	8	6	9	5	10	6	6	6	2	7	2	5	7	5	4	4	9	4	8	4	7½	6	0
31	6	7	6	7	5	10	6	6	6	1	7	2	5	6	5	3	4	9	4	7	4	7	6	0

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Appendix A.
No. 3.

Heights of Water on Lock Sills, June, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
June 1	8	7	8	3	9	3	6	9	6	9	7	9	8	3	6	9	6	8	6	6	6	7	5	9	6	5	6	1	7	1	5	5	5	3	4	9	4	8	4	7	6	1
2	8	6	8	2	9	2	6	9	6	9	7	9	8	3	6	9	6	7	6	6	6	6	5	9	6	5	6	1	7	1	5	5	5	2	4	9	4	8	4	6½	6	1
3	8	6½	8	2	9	2	6	9	6	9	7	9	8	3	6	9	6	7	6	6	6	6	5	9	6	5	6	1	7	1	5	6	5	2	4	9	4	8	4	6	6	3
4	8	6¾	8	2	9	2	6	8	6	8	7	9	9	3	6	9	6	6	6	6	6	6	5	9	6	4	6	0	7	0	5	6	5	3	4	9	4	8	4	6	6	3
5	8	6½	8	2	9	2	6	8	6	8	7	6	8	0	6	9	6	6	6	6	6	6	5	8	6	4	6	0	7	0	5	5	5	3	4	9	4	2	4	5½	6	3
6	8	6	8	1	9	1	6	8	6	8	7	6	8	0	6	9	6	6	6	6	6	6	5	8	6	4	6	0	7	0	5	5	5	3	4	8	4	7	4	5	6	4
7	8	5½	8	0	9	0	6	7	6	8	7	6	8	0	6	9	6	6	6	4	6	5	5	8	6	3	5	11	6	11	5	4	5	2	4	7	4	6	4	5	6	4
8	8	4½	8	0	9	0	6	6	6	7	7	6	8	0	6	8	6	5	6	3	6	3	5	7	6	3	5	11	6	11	5	4	5	2	4	6	4	5	4	5	6	4
9	8	4	7	11	8	11	6	6	6	7	7	4	7	10	6	8	6	5	6	3	6	3	5	7	6	3	5	10	6	10	5	5	5	1	4	7	4	6	4	5	6	6
10	8	4	7	11	8	11	6	6	6	6	7	4	7	10	6	9	6	6	6	3	6	3	5	7	6	3	5	10	6	10	5	5	5	1	4	9	4	8	4	6	6	7
11	8	3	7	11	8	11	6	6	6	6	7	4	7	10	6	9	6	6	6	4	6	3	5	9	6	4	5	10	6	10	5	6	5	2	4	11	4	11	5	1	6	7
12	8	2½	7	11	8	11	6	7½	6	8	7	4	7	10	6	10	6	7	6	4	6	3	5	10	6	4	5	10	6	10	5	7	5	3	5	1	5	1	5	11	6	6
13	8	3	7	10	8	10	6	6	6	9	7	4	7	10	6	10	6	6	6	4	6	3	5	11	6	5	5	11	6	10	5	9	5	5	5	2	5	2	5	6	6	7
14	8	3	7	10	8	10	6	6	6	9	7	4	7	10	6	10	6	6	6	4	6	3	6	0	6	6	5	11	6	11	5	11	5	6	5	2	5	3	5	4½	6	8
15	8	3	7	10	8	10	6	6	6	9	7	4	7	10	6	9	6	6	6	4	6	3	6	0	6	6	6	0	7	0	5	11	5	7	5	2	5	3	5	3	6	7
16	8	3½	7	10	8	10	6	6	6	8	7	4	7	10	6	9	6	5	6	4	6	3	6	0	6	6	6	0	7	0	5	11	5	8	5	3	5	4	5	2	6	7
17	8	3	7	10	8	10	6	6	6	8	7	8	8	2	6	9	6	6	6	4	6	3	5	11	6	6	6	0	7	0	6	0	5	9	5	3	5	4	5	2½	6	7
18	8	3	7	11	8	11	6	6½	7	0	7	10	8	4	6	10	6	7	6	5	6	3	5	11	6	7	6	1	7	1	6	1	5	10	5	4	5	5	5	2½	6	7
19	8	2¾	7	11	8	11	6	7	7	1	8	0	8	6	7	2	6	11	6	10	6	3	5	11	6	8	6	1	7	1	6	2	5	10	5	4	5	4	5	3	6	6
20	8	2¾	7	11	8	11	6	8	7	1	8	0	8	6	7	3	7	0	7	1	6	4	6	0	6	9	6	1	7	1	6	4	5	10	5	3	5	3	5	3	6	6
21	8	3	7	11	8	11	6	8½	7	0	7	10	8	4	7	2	6	11	7	1	6	5	5	11	6	10	6	2	7	2	6	4	5	11	5	4	5	2	5	2½	6	5
22	8	4	7	11	8	11	6	7	7	0	7	9	8	3	7	2	6	11	6	10	6	6	5	10	6	10	6	2	7	2	6	4	5	11	5	5	5	1	5	3	6	5
23	8	3¾	7	11	8	11	6	7	6	11	7	9	8	3	7	2	6	10	6	8	6	6	5	10	6	10	6	2	7	2	6	4	5	11	5	6	5	0	5	2½	6	5
24	8	4	7	11	8	11	6	8	6	11	7	9	8	3	7	2	6	10	6	8	6	6	5	10	6	9	6	2	7	2	6	4	5	11	5	7	5	0	5	1½	6	4
25	8	4	7	10	8	10	6	5½	6	11	7	8	8	2	7	1	6	9	6	7	6	5	5	10	6	9	6	2	7	2	6	4	5	11	5	7	4	11	5	1	6	3
26	8	3¾	7	10	8	10	6	5	6	10	7	8	8	2	7	1	6	9	6	7	6	5	5	9	6	9	6	2	7	2	6	4	5	11	5	6	4	10	5	1	6	3
27	8	3¾	7	10	8	10	6	5	6	10	7	6	8	0	7	1	6	9	6	7	6	5	5	9	6	8	6	2	7	2	6	4	5	10	5	5	4	9	5	1	6	2
28	8	3	7	10	8	10	6	5	6	9	7	6	8	0	7	1	6	9	6	8	6	5	5	8	6	8	6	2	7	2	6	4	5	9	5	5	4	9	4	11	6	2
29	8	3¼	7	9	8	9	6	5	6	9	7	5	7	11	7	1	6	8	6	8	6	5	5	8	6	8	6	1	7	1	6	4	5	9	5	4	4	8	4	10	6	1
30	8	3	7	9	8	9	6	3	6	9	7	5	7	11	7	0	6	8	6	7	6	5	5	8	6	7	6	1	7	1	6	3	5	9	5	3	4	8	4	9	6	0

Appendix A.
No. 3.

Heights of Water on Lock Sills, July, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina. Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.		Shannon Bridge. Low. Sill.		Shannon Bridge. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July 1	8	2	7	9	8	9	6	3	6	9	7	4	7	10	7	0	6	7
2	8	2¾	7	9	8	9	6	3	6	8	7	4	7	10	7	0	6	7
3	8	1	7	9	8	9	6	3	6	8	7	4	7	10	6	11	6	6
4	8	1	7	8	8	8	6	2½	6	8	7	3	7	9	6	11	6	6
5	7	11½	7	8	8	8	6	2½	6	8	7	3	7	9	6	11	6	6
6	8	0	7	7	8	7	6	2	6	7	7	3	7	9	6	10	6	6
7	8	0	7	6	8	6	6	2	6	7	7	2	7	8	6	10	6	6
8	7	11½	7	5	8	5	6	1	6	7	7	2	7	8	6	10	6	5
9	7	11	7	5	8	5	6	1	6	6	7	2	7	8	6	9	6	4
10	7	11	7	4	8	4	5	11	6	6	7	4	7	10	6	9	6	5
11	7	9½	7	4	8	4	5	11	6	5	7	3	7	9	6	8	6	4
12	7	9½	7	3	8	3	6	0	6	5	7	2	7	8	6	8	6	3
13	7	9½	7	2	8	2	6	0	6	4	7	1	7	7	6	8	6	3
14	7	8¾	7	2	8	2	6	0	6	5	7	0	7	6	6	7	6	4
15	7	8	7	2	8	2	6	0	6	5	7	0	7	6	6	8	6	5
16	7	8½	7	2	8	2	6	0	6	5	7	0	7	6	6	8	6	4
17	7	8	7	2	8	2	6	0	6	5	7	0	7	6	6	8	6	4
18	7	7½	7	2	8	2	6	0	6	5	7	0	7	6	6	8	6	5
19	7	8	7	2	8	2	6	0½	6	5	7	0	7	6	6	9	6	5
20	7	7½	7	2	8	2	5	10	6	5	7	0	7	6	6	9	6	5
21	7	8	7	2	8	2	5	10	6	5	7	0	7	6	6	9	6	5
22	7	8	7	1	8	1	5	10	6	5	7	0	7	6	6	9	6	5
23	7	8	7	1	8	1	5	10	6	4	7	0	7	6	6	8	6	4
24	7	8¼	7	0	8	0	5	9½	6	4	7	1	7	7	6	7	6	4
25	7	8	7	0	8	0	5	9½	6	4	7	1	7	7	6	7	6	4
26	7	7	7	0	8	0	5	10	6	5	7	2	7	8	6	7	6	4
27	7	8	7	0	8	0	5	10	6	5	7	6	8	0	6	8	6	5
28	7	9	7	1	8	1	5	10½	6	6	7	6	8	0	6	10	6	6
29	8	1	7	3	8	3	5	10	6	9	7	6	8	2	7	8	7	0
30	8	0	7	4	8	4	6	1	7	1	7	8	8	4	7	8	7	0
31	8	0	7	4	8	4	6	4½	7	2	8	0	8	6	7	10	7	2

1837.	Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.		Cloondrah. Low. Sill.		Cloondrah. Up. Sill.		Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July 1	6	7	6	4	5	8	6	7	6	1	7	1	6	3	5	8	5	3	4	9	4	8½	6	0
2	6	6	6	3	5	7	6	6	6	1	7	1	6	2	5	8	5	3	4	9	4	7½	5	11
3	6	6	6	3	5	7	6	6	6	0	7	0	6	1	5	8	5	2	4	8	4	6½	5	11
4	6	6	6	3	5	6	6	6	6	0	7	0	6	1	5	7	5	1	4	8	4	5½	5	10
5	6	6	6	3	5	5	6	6	6	0	7	0	6	0	5	7	5	1	4	7	4	5	5	10
6	6	7	6	3	5	5	6	5	5	11	6	11	5	11	5	6	5	0	4	7	4	4½	5	10
7	6	5	6	3	5	5	6	5	5	11	6	11	5	10	5	5	5	0	4	7	4	4	5	9
8	6	5	6	2	5	4	6	4	5	11	6	11	5	9	5	4	4	11	4	6	4	3½	5	9
9	6	4	6	2	5	4	6	3	5	10	6	10	5	8	5	4	4	11	4	6	4	6	5	9
10	6	4	6	2	5	3	6	2	6	10	6	10	5	8	5	3	4	11	4	6	4	4	5	9
11	6	3	6	2	5	3	6	2	5	10	6	10	5	7	5	2	4	10	4	5	4	3½	5	8
12	6	3	6	2	5	3	6	2	5	10	6	10	5	6	5	1	4	9	4	4	4	2½	5	8
13	6	3	6	2	5	2	6	1	5	10	6	10	5	5	5	0	4	9	4	4	4	2½	5	7
14	6	4	6	2	5	2	6	1	5	11	6	11	5	4	5	1	4	8	4	5	4	2½	5	7
15	6	4	6	1	5	2	6	1	5	11	6	11	5	5	5	2	4	7	4	6	4	3	5	7
16	6	4	6	1	5	3	6	2	5	10	6	11	5	6	5	1	4	8	4	7	4	2½	5	7
17	6	4	6	2	5	2	6	2	5	11	6	11	5	7	5	0	4	8	4	6	4	2½	5	7
18	6	3	6	0	5	1	6	1	5	11	6	11	5	7	5	0	4	8	4	6	4	3	5	8
19	6	3	6	0	5	1	6	0	5	11	6	11	5	6	5	0	4	8	4	5	4	5	5	9
20	6	3	6	0	5	0	5	11	5	10	6	10	5	6	5	0	4	8	4	5	4	3½	5	9
21	6	3	6	0	5	0	5	11	5	10	6	10	5	6	5	0	4	7	4	5	4	3½	5	9
22	6	3	6	0	4	11	5	11	5	9	6	9	5	6	5	1	4	7	4	5	4	3½	5	9
23	6	2	6	0	4	11	5	10	5	9	6	9	5	7	5	1	4	6	4	4	4	3½	5	10
24	6	2	6	0	4	10	5	11	5	8	6	8	5	7	5	1	4	6	4	4	4	5½	5	11
25	6	2	5	11	4	10	5	11	5	8	6	8	5	7	5	0	4	6	4	4	4	4½	5	11
26	6	2	5	11	4	11	5	11	5	9	6	7	5	7	5	0	4	6	4	4	4	4	6	0
27	6	2	5	11	5	0	5	11	5	7	6	7	5	8	5	0	4	7	4	5	4	4½	6	0
28	6	2	6	0	5	1	6	1	5	7	6	7	5	8	5	1	4	8	4	8	4	6	6	1
29	6	5	6	2	5	2	6	3	5	8	6	8	5	9	5	1	4	9	4	10	4	10	6	1
30	6	6	6	2	5	3	6	4	5	8	6	8	5	11	5	2	4	10	4	11	4	9	6	0
31	6	9	6	2	5	3	6	6	5	10	6	10	6	0	5	2	5	0	5	1	4	9½	6	0

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Appendix A.
No. 3.

Heights of Water on Lock Sills, August, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Aug. 1	8	1	-	-	8	6	6	4½	7	3	8	0	8	6	7	11	7	3	6	11	6	2
2	8	1	-	-	8	8	6	5	7	3	8	0	8	6	7	10	7	3	7	1	6	1
3	8	2½	-	-	8	9	6	5	7	3	7	11	8	5	7	9	7	2	7	1	6	2
4	8	2½	-	-	8	9½	6	5	7	3	7	11	8	5	7	9	7	2	7	1	6	2
5	8	3	-	-	8	9½	6	5	7	3	7	10	8	4	7	9	7	2	6	11	6	3
6	8	3	-	-	8	10	6	5	7	3	7	10	8	4	7	10	7	3	6	11	6	3
7	8	3	-	-	8	10	6	5	7	2	7	10	8	4	7	9	7	2	6	10	6	3
8	8	3	-	-	8	10	6	4¼	7	2	7	10	8	4	7	9	7	2	6	10	6	3
9	8	3	-	-	8	9½	6	5½	7	2	7	9	8	3	7	9	7	2	6	11	6	3
10	8	3	-	-	8	9	6	5½	7	2	7	9	8	3	7	6	7	0	6	11	6	3
11	8	3	-	-	8	9	6	5½	7	2	7	9	8	3	7	6	7	1	6	11	6	3
12	8	3¼	-	-	8	9	6	5½	7	0	7	9	8	3	7	6	7	1	6	11	6	3
13	8	2½	-	-	8	9	6	5	7	0	7	9	8	3	7	5	7	0	6	10	6	3
14	8	2½	-	-	8	8½	6	5	6	11	7	9	8	3	7	4	6	11	6	9	6	3
15	8	2	-	-	8	8	6	4	6	9	7	7	8	1	7	3	6	10	6	8	6	3
16	8	2	-	-	8	8	6	3¼	6	9	7	6	8	0	7	3	6	10	6	8	6	3
17	8	1½	-	-	8	7	6	2½	6	9	7	4	7	10	7	3	6	10	6	8	6	3
18	8	0½	-	-	8	7	6	5	6	10	7	4	7	10	7	4	6	11	6	8	6	3
19	8	1	-	-	8	6	6	3	7	0	7	3	7	9	7	6	7	1	6	10	6	5
20	7	11½	-	-	8	6	6	4	7	0	7	3	7	9	7	6	7	1	6	11	6	6
21	7	10	-	-	8	5½	6	8	6	11	7	2	7	8	7	5	7	0	7	0	6	6
22	8	0	-	-	8	6	6	2½	6	11	7	2	7	8	7	5	7	0	6	10	6	6
23	8	1	-	-	8	6	6	3	7	1	7	2	7	8	7	6	7	1	6	10	6	6
24	8	1	-	-	8	7	6	3	7	1	7	2	7	8	7	7	7	2	6	9	6	6
25	8	0½	-	-	8	7	6	3	7	1	7	1	7	7	7	6	7	1	6	9	6	6
26	8	2	-	-	8	7	6	4¼	7	2	7	0	7	6	7	5	7	0	6	10	6	6
27	8	1	-	-	8	8	6	4½	7	2	7	0	7	6	7	4	7	0	6	9	6	6
28	8	0½	-	-	8	9	6	3½	7	0	7	2	7	8	7	4	6	11	6	9	6	6
29	8	0½	-	-	8	9	6	3	6	11	7	2	7	8	7	3	6	10	6	9	6	6
30	8	0	-	-	8	9	6	3	6	10	7	3	7	9	7	2	6	9	6	8	6	6
31	8	1	-	-	8	8½	6	3	6	10	7	4	7	10	7	2	6	9	6	7	6	5

1837.	Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Aug. 1	5	4	6	7	6	0	7	0	6	1	5	3	4	9	4	8	4	9½	6	1
2	5	5	6	7	6	1	7	1	6	1	5	2	5	2	5	4	4	9½	6	1
3	5	5	6	8	6	1	7	1	6	1	5	4	5	3	5	6	6	0	6	5
4	5	6	6	8	6	1	7	1	6	2	5	7	5	4	5	10	6	0	6	9
5	5	6	6	7	6	1	7	1	6	3	5	8	5	5	6	0	5	11	6	11
6	5	7	6	7	5	11	6	11	6	4	5	10	5	6	5	11	5	10	6	10
7	5	6	6	7	5	11	6	11	6	5	5	11	5	6	5	10	5	9	6	8
8	5	6	6	7	5	11	6	11	6	6	5	11	5	6	5	10	5	8½	6	7
9	5	6	6	7	5	11	6	11	6	6	5	11	5	6	5	9	5	7½	6	6
10	5	5	6	8	5	11	6	11	6	5	6	0	5	6	5	8	5	7	6	6
11	5	5	6	8	5	10	6	10	6	6	6	0	5	7	5	8	5	6	6	6
12	5	6	6	8	5	10	6	10	6	6	6	0	5	7	5	8	5	5½	6	5
13	5	6	6	8	5	10	6	10	6	5	6	0	5	6	5	7	5	4½	6	5
14	5	6	6	9	5	10	6	10	6	5	6	0	6	6	5	7	5	4	6	4
15	5	7	6	9	5	11	6	11	6	6	5	11	5	6	5	6	4	3	6	4
16	5	7	6	8	5	11	6	11	6	5	5	11	5	5	5	4	4	1	6	3
17	5	8	6	8	6	0	7	0	6	4	5	11	5	5	5	3	4	0	6	2
18	5	9	6	9	6	0	7	0	6	4	5	9	5	4	5	2	4	0	6	1
19	5	9	6	9	6	2	7	2	6	4	5	10	5	3	5	1	4	11½	6	1
20	6	10	6	10	6	2	7	2	6	4	5	10	5	2	4	11	4	11	6	0
21	5	11	6	10	6	2	7	2	6	4	5	10	5	2	4	11	4	10	5	11
22	6	0	6	9	6	2	7	2	6	4	5	9	5	2	4	11	4	9	6	0
23	5	11	6	9	6	2	7	2	6	3	5	9	5	1	4	11	4	9	6	1
24	5	10	6	8	6	2	7	2	6	2	5	8	5	2	4	11	4	9	6	1
25	5	10	6	8	6	1	7	1	6	2	5	7	5	3	4	10	4	8	6	0
26	5	9	6	8	6	1	7	1	6	1	5	6	5	2	4	9	4	7	6	1
27	5	7	6	7	6	0	7	0	6	1	5	6	5	2	4	8	4	6½	6	0
28	5	6	6	6	6	0	7	0	6	1	5	6	5	2	4	8	4	6	5	11
29	5	6	6	6	6	0	7	0	6	0	5	5	5	0	4	7	4	5	5	11
30	5	6	6	6	5	11	6	11	5	11	5	4	4	11	4	6	4	4½	5	11
31	6	5	6	5	5	11	6	11	5	11	5	3	4	10	4	5	4	3½	5	11

Appendix A. No. 3.

Heights of Water on Lock Sills, September, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Sept. 1	7	11½	-	-	8	8	6	3	6	10	7	4	7	10	7	3	6	10
2	8	1	-	-	8	8	6	3	6	10	7	5	7	11	7	2	6	9
3	8	0¼	-	-	8	9	6	1	6	10	7	5	7	11	7	1	6	8
4	7	11	-	-	8	9	6	1	6	9	7	5	7	11	7	0	6	7
5	8	0	-	-	8	8½	6	1	6	9	7	4	7	10	7	1	6	8
6	7	11½	-	-	8	8	6	1	6	9	7	3	7	9	7	0	6	7
7	7	10	-	-	8	8	6	1	6	9	7	3	7	9	7	1	6	8
8	7	10	-	-	8	8	6	2	6	9	7	2	7	8	7	0	6	7
9	7	11	-	-	8	6½	6	2	6	9	7	2	7	8	7	0	6	7
10	7	11½	-	-	8	5	6	2	6	9	7	2	7	8	7	1	6	8
11	7	11	-	-	8	6	6	4	6	9	7	2	7	8	7	2	6	9
12	8	0½	-	-	8	6	6	1½	6	9	7	1	7	7	7	2	6	9
13	8	2	-	-	8	7	6	2	6	11	7	0	7	6	7	3	6	10
14	8	1	-	-	8	8½	6	5	7	1	7	2	7	8	7	4	6	11
15	8	1	-	-	8	9	6	7	7	2	7	3	7	9	7	5	7	0
16	8	2	-	-	8	9½	6	7	7	3	7	4	7	10	7	6	7	1
17	8	1½	-	-	8	10	6	10	7	5	7	8	8	2	7	7	7	2
18	8	4½	-	-	9	0	6	10	7	6	8	0	8	6	7	11	7	6
19	8	6	-	-	9	1	6	10	7	7	8	4	8	10	8	4	7	11
20	8	7	-	-	9	3	7	1	7	10	8	6	9	0	8	8	8	1
21	8	8	-	-	9	3	7	0½	7	11	8	9	9	3	8	9	8	2
22	8	10	-	-	9	4	7	1	7	11	8	9	9	3	8	9	8	2
23	8	10½	-	-	9	5	7	1	7	10	8	9	9	3	8	8	8	1
24	8	11	-	-	9	6	7	1	7	9	8	8	9	2	8	6	7	11
25	8	10½	-	-	9	6	7	2	7	8	8	8	9	2	8	4	7	9
26	8	10½	-	-	9	6	7	0½	7	7	8	6	9	0	8	3	7	7
27	8	10½	-	-	9	6	7	0½	7	6	8	6	9	0	8	1	7	6
28	8	10	-	-	9	6	7	0	7	6	8	4	8	10	7	11	7	6
29	8	10	-	-	9	5	7	0	7	6	8	2	8	8	7	10	7	5
30	8	9½	-	-	9	5	7	0	7	5	8	0	8	6	7	9	7	4

1837.	Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Sept. 1	6	7	6	4	5	5	6	5	5	11	6	11	5	10	5	3	4	10	4	5	4	3½	5	11
2	6	7	6	4	5	5	6	5	5	11	6	11	5	9	5	2	4	10	4	6	4	4½	6	0
3	6	7	6	4	5	4	6	4	6	0	7	0	5	9	5	2	4	10	4	6	4	4	5	11
4	6	6	6	3	5	4	6	4	6	0	7	0	5	0	5	1	4	9	4	7	4	4	5	10
5	6	6	6	3	5	4	6	4	6	0	7	0	5	9	5	2	4	9	4	7	4	6	6	0
6	6	6	6	3	5	5	6	3	6	0	7	2	5	9	5	2	4	10	4	7	4	5½	5	11
7	6	6	6	3	5	5	6	3	6	0	7	2	5	9	5	2	4	10	4	8	4	7	5	11
8	6	6	6	1	5	5	6	3	6	0	7	2	5	8	5	2	4	11	4	9	4	10	6	1
9	6	6	6	1	5	5	6	3	6	0	7	2	5	9	5	2	5	0	4	10	4	10	6	1
10	6	6	6	1	5	4	6	3	6	0	7	2	5	9	5	2	4	11	4	11	4	11	6	2
11	6	6	6	3	5	4	6	4	6	0	7	2	5	10	5	3	4	11	5	0	5	1	6	5
12	6	6	6	3	5	4	6	5	6	0	7	2	5	11	5	3	5	0	5	1	5	1	6	5
13	6	6	6	3	5	3	6	5	6	0	7	2	5	11	5	4	5	1	5	3	5	5½	6	9
14	6	6	6	4	5	4	6	6	6	3	7	3	6	1	5	6	5	2	5	8	5	9	6	10
15	6	6	6	4	5	5	6	7	6	3	7	5	6	3	5	8	5	3	5	11	5	11½	6	11
16	7	8	6	4	5	5	6	8	6	5	7	7	6	5	5	10	5	4	6	0	6	0	7	3
17	7	10	6	5	5	6	7	4	6	1	8	0	6	11	6	4	5	8	6	5	6	8	7	4
18	7	1	6	5	5	7	7	9	7	5	8	8	7	3	6	7	6	1	6	9	6	9½	7	5
19	7	1	6	5	5	8	7	9	7	6	8	9	7	4	6	9	6	5	6	9	6	10	7	5
20	7	10	6	7	5	10	7	10	7	6	8	9	7	5	6	10	6	6	6	8	6	10	7	4
21	7	10	6	9	5	11	7	10	7	7	8	10	7	5	6	11	6	7	6	9	6	9	7	3
22	7	10	6	9	6	0	7	9	7	7	8	10	7	5	7	0	6	7	6	9	6	8	7	2
23	7	10	6	9	6	1	7	9	7	7	8	11	7	4	7	0	6	7	6	7	6	7	7	1
24	7	10	6	9	6	2	7	8	7	6	8	9	7	3	6	11	6	6	6	6	6	6	7	1
25	7	8	6	10	6	2	7	8	7	1	8	8	7	3	6	11	6	6	6	5	6	4½	6	11
26	7	7	7	0	6	2	7	7	7	1	8	8	7	2	6	10	6	5	6	4	6	3	6	11
27	7	7	7	0	6	2	7	7	7	2	8	8	7	1	6	10	6	4	6	3	6	1½	6	10
28	7	7	7	0	6	1	7	6	7	1	8	7	7	0	6	9	6	3	6	2	6	0	6	9
29	7	5	7	0	6	1	7	5	7	1	8	7	6	11	6	8	6	4	6	0	5	11	6	7
30	7	4	7	0	6	1	7	4	7	0	8	5	6	10	6	7	6	3	5	10	5	10	6	7

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Appendix A. No. 3.

Heights of Water on Lock Sills, October, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Oct. 1	8	8	-	-	9	5	7	0	7	5	8	0	8	6	7	8	7	4	7	4	7	0	6	1	7	4	6	11	8	4	6	10	6	7	6	2	5	9	5	9	6	7
2	8	8	-	-	9	4	7	0	7	4	8	0	8	6	7	8	7	4	7	4	7	0	6	2	7	5	6	11	8	4	6	9	6	6	6	3	5	9	5	9	6	6
3	8	7½	-	-	9	3	7	0	7	5	8	0	8	6	7	9	7	5	7	4	7	0	6	2	7	4	6	11	8	4	6	9	6	6	6	3	5	9	5	9	6	7
4	8	7	-	-	9	4	7	0	7	4	8	0	8	6	7	9	7	5	7	4	7	0	6	3	7	4	6	11	8	4	6	8	6	6	6	2	5	9	5	9	6	6
5	8	7	-	-	9	4	7	0½	7	4	8	0	8	6	7	9	7	5	7	4	7	0	6	3	7	5	6	0	8	5	6	8	6	5	6	1	5	9	5	9	6	8
6	8	7½	-	-	9	4	7	1	7	4	8	1	8	7	7	9	7	5	7	5	7	0	6	4	7	5	6	0	8	5	6	8	6	5	6	1	5	10	5	9	6	9
7	8	8	-	-	9	4	7	1	7	4	8	1	8	7	7	10	7	6	7	7	7	0	6	4	7	5	6	1	8	6	6	8	6	5	6	1	5	10	5	9½	6	9
8	8	8	-	-	9	4	7	2	7	5	8	1	8	7	7	9	7	6	7	9	7	0	6	3	7	5	6	1	8	6	6	8	6	5	6	1	5	11	5	9½	6	8
9	8	8	-	-	9	4	7	1	7	5	8	1	8	7	7	9	7	5	7	6	7	0	6	4	7	4	6	1	8	6	6	8	6	4	6	1	5	11	5	10	6	8
10	8	7¾	-	-	9	4	7	1	7	4	8	0	8	6	7	9	7	5	7	6	7	0	6	4	7	4	6	0	8	5	6	7	6	4	6	1	5	10	5	9½	6	9
11	8	7	-	-	9	3	7	1	7	4	8	0	8	6	7	9	7	4	7	5	7	0	6	4	7	4	6	0	8	5	6	7	6	3	6	1	5	10	5	9	6	9
12	8	7½	-	-	9	3	6	10	7	4	8	0	8	6	7	8	7	4	7	4	7	0	6	3	7	3	6	0	8	5	6	7	6	2	6	0	5	9	5	8	6	8
13	8	8	-	-	9	3	6	10	7	4	7	11	8	5	7	8	7	4	7	4	7	0	6	3	7	2	6	1	8	4	6	6	6	1	6	0	5	9	5	7	6	7
14	8	7½	-	-	9	3	6	10	7	3	7	11	8	5	7	7	7	3	7	4	7	0	6	4	7	2	6	1	8	4	6	5	6	0	5	11	5	8	5	6	6	6
15	8	7½	-	-	9	2	6	10	7	3	7	10	8	4	7	5	7	2	7	4	7	0	6	4	7	2	6	1	8	4	6	5	6	0	5	10	5	7	5	5½	6	5
16	8	7	-	-	9	2	6	10	7	2	7	10	8	4	7	4	7	1	7	1	6	10	6	5	7	2	6	1	8	4	6	5	6	0	5	9	5	7	5	4½	6	5
17	8	6¼	-	-	9	2	6	10	7	2	7	9	8	3	7	3	7	0	7	2	6	10	6	5	7	2	6	0	8	3	6	4	5	11	5	8	5	6	5	4	6	4
18	8	6¼	-	-	9	2	6	8	7	1	7	9	8	3	7	3	7	0	7	0	6	10	6	4	7	1	5	11	8	2	6	4	5	11	5	6	5	5	5	3	6	4
19	8	6	-	-	9	1	6	8	7	1	7	9	8	3	7	3	7	1	7	0	6	10	6	4	7	1	5	10	8	1	6	3	5	10	5	5	5	4	5	2	6	3
20	8	6	-	-	9	1	6	8	7	1	7	9	8	3	7	3	7	1	7	0	6	9	6	3	7	1	5	10	8	1	6	2	5	10	5	4	5	3	5	2	6	3
21	8	4½	-	-	9	1	6	8	7	1	7	9	8	3	7	3	7	0	6	11	6	9	6	3	7	1	5	11	8	0	6	2	5	9	5	4	5	3	5	1½	6	4
22	8	4	-	-	9	1	6	7	7	0	7	9	8	3	7	3	7	0	6	11	6	9	6	3	7	0	6	4	8	0	6	2	5	9	5	3	5	3	5	1½	6	4
23	8	5	-	-	9	1	6	7	7	0	7	10	8	4	7	2	6	11	6	11	6	9	6	2	6	11	6	3	7	11	6	2	5	9	5	3	5	3	5	1	6	5
24	8	6	-	-	9	1	6	7	7	0	7	9	8	3	7	2	7	0	6	11	6	9	6	1	6	11	6	4	7	11	6	2	5	9	5	6	5	4	5	1½	6	6
25	8	4½	-	-	9	0	6	7½	7	1	7	9	8	3	7	2	7	1	6	11	6	9	6	1	6	11	6	4	7	11	6	1	5	9	5	3	5	5	5	3½	6	7
26	8	3½	-	-	9	0	6	7½	7	1	7	10	8	4	7	2	7	1	6	11	6	9	6	1	7	0	6	5	7	11	6	1	5	9	5	4	5	6	5	4	6	7
27	8	6	-	-	9	2	6	8	7	1	8	0	8	6	7	3	7	2	6	11	6	9	6	1	7	0	6	5	7	11	6	2	5	9	5	5	5	8	5	8	6	8
28	8	8	-	-	9	2	6	10	7	3	8	2	8	8	7	4	7	4	6	11	6	9	6	1	7	1	6	7	8	1	6	3	5	10	5	6	5	10	5	10	6	10
29	8	10	-	-	9	4	7	1	7	5	8	3	8	9	7	6	7	5	6	11	6	9	6	2	7	2	6	8	8	2	6	4	5	11	5	7	5	11	6	0	7	0
30	8	10	-	-	9	6	7	1½	7	5	8	6	9	0	7	10	7	6	6	11	6	9	6	2	7	3	6	8	8	2	6	6	6	1	5	8	6	2	6	7	7	1
31	9	1	-	-	9	8	7	6	7	9	8	10	9	4	7	11	7	8	7	3	6	9	6	3	7	6	7	0	8	6	6	9	6	3	6	1	6	8	6	10	7	5

Appendix A.
No. 3.

Heights of Water on Lock Sills, November, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Nov. 1	9	8	-	-	10	0	7	6½	7	11	9	0	9	6	7	11	7	10
2	9	9½	-	-	10	4	8	4	8	3	9	3	9	9	8	4	8	0
3	10	1	-	-	10	6	9	0	8	7	9	4	9	10	8	7	8	3
4	10	2½	-	-	10	10	9	0¼	8	8	9	6	10	0	8	10	8	5
5	10	4½	-	-	11	0	8	8	8	7	9	6	10	0	9	4	8	11
6	10	4½	-	-	11	0	8	8	8	6	9	7	10	1	9	4	8	10
7	10	6	-	-	11	0	8	10½	8	4	9	4	9	10	9	3	8	10
8	10	6½	-	-	11	0	8	11	8	4	9	2	9	8	9	2	8	9
9	10	5	-	-	11	0	8	11	8	3	9	4	9	10	9	1	8	9
10	10	4¾	-	-	11	0	9	1	8	2	9	4	9	10	9	0	8	9
11	10	5¼	-	-	11	0	9	0	8	2	9	3	9	9	9	0	8	9
12	10	4¾	-	-	11	0	8	9	8	2	9	3	9	9	9	0	8	9
13	10	6	-	-	11	0	8	10	8	2	9	3	9	9	9	0	8	9
14	10	6	-	-	11	0	8	10	8	3	9	3	9	9	9	1	8	10
15	10	5½	-	-	11	0	8	9	8	3	9	4	9	10	9	1	8	10
16	10	4¾	-	-	11	0	8	9	8	3	9	4	9	10	9	2	8	11
17	10	6	-	-	11	0	8	9½	8	4	9	6	10	0	9	3	9	0
18	10	5½	-	-	11	1	8	9¾	8	5	9	6	10	0	9	5	9	1
19	10	6¼	-	-	11	2	9	1	8	5	9	7	10	1	9	5	9	1
20	10	7½	-	-	11	2	9	2	8	6	9	7	10	1	9	6	9	2
21	10	9	-	-	11	4	9	4	8	6	9	8	10	2	9	6	9	2
22	11	0	-	-	11	5	9	4	8	7	9	8	10	2	9	8	9	4
23	11	1	-	-	11	7	10	5	9	1	10	0	10	6	10	2	9	9
24	11	7	-	-	11	10	10	4	9	8	10	0	11	4	11	1	10	6
25	11	11	-	-	12	5	10	6	9	10	11	0	11	6	11	2	10	8
26	12	0	-	-	12	7	10	10	9	8	11	2	11	8	11	2	10	9
27	12	2½	-	-	12	8	10	10	9	8	10	11	11	5	10	11	10	6
28	12	3½	-	-	12	9	10	10	9	6	10	9	11	3	10	10	10	5
29	12	3	-	-	12	9	10	8	9	5	10	5	10	11	10	6	10	3
30	12	2¾	-	-	12	9	10	8	9	3	10	4	10	10	10	5	10	3

1837.	Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Nov. 1	7	11	7	3	6	4	7	10	7	5	8	7	7	1	6	7	6	4	7	2	7	2½	7	8
2	8	1	7	3	6	4	7	11	7	8	8	7	7	3	6	10	6	6	7	3	7	5	7	9
3	8	4	7	5	6	5	8	1	7	11	8	8	7	6	7	1	6	8	7	5	7	6	8	0
4	8	7	7	5	6	5	8	3	8	0	8	9	7	8	7	4	6	10	7	6	7	9	8	0
5	8	6	7	6	6	6	8	5	8	0	8	9	7	11	7	6	7	0	7	8	7	10	8	1
6	8	6	7	8	6	6	8	5	8	1	8	7	8	0	7	7	7	2	7	9	7	10	8	0
7	8	6	7	8	6	7	8	6	8	1	8	7	8	0	7	7	7	2	7	9	7	10	7	10
8	8	7	7	8	6	7	8	6	8	1	8	7	8	1	7	8	7	3	7	9	7	9	7	9
9	8	7	7	9	6	8	8	6	8	2	8	7	8	1	7	8	7	4	7	8	7	9	7	9
10	8	8	7	10	6	8	8	6	8	2	8	7	8	1	7	8	7	4	7	9	7	11	7	10
11	8	9	7	11	6	9	8	7	8	2	8	7	8	1	7	8	7	4	7	10	7	11	7	10
12	8	8	8	1	6	9	8	7	8	3	8	7	8	1	7	8	7	4	7	9	7	9½	7	9
13	8	8	8	1	6	10	8	7	8	2	8	7	8	1	7	8	7	3	7	8	7	8	7	8
14	8	8	8	2	6	11	8	7	8	2	8	7	8	1	7	9	7	3	7	9	7	11	7	10
15	8	8	8	2	7	1	8	8	8	2	8	7	8	2	7	9	7	4	7	10	7	11	7	9
16	8	9	8	2	7	2	8	8	8	4	8	8	8	2	7	9	7	5	7	10	7	11	7	8
17	8	9	8	2	7	3	8	10	8	6	8	10	8	3	7	10	7	5	7	11	8	0	7	11
18	8	11	8	4	7	5	8	11	8	6	8	10	8	4	7	10	7	6	7	11	8	0	7	10
19	9	0	8	5	7	6	8	11	8	6	8	10	8	4	7	10	7	6	7	11	7	11½	7	10
20	9	1	8	5	7	7	9	0	8	7	8	10	8	4	7	10	7	6	7	11	8	0	7	9
21	9	2	8	5	7	9	9	0	8	7	8	10	8	4	7	10	7	6	7	11	8	0½	8	0
22	9	6	8	6	7	11	9	1	8	10	9	0	8	5	7	10	7	7	8	0	8	3	8	2
23	10	1	8	9	8	4	9	6	9	4	9	7	8	11	8	1	7	9	8	8	9	0	8	6
24	10	5	9	0	8	6	10	0	9	11	9	11	9	3	8	2	7	10	8	8	8	11	8	9
25	10	7	9	4	8	7	10	1	9	10	9	9	9	2	8	3	8	0	8	9	8	10	8	6
26	10	7	9	6	8	8	10	1	9	8	9	9	9	2	8	4	8	0	8	9	8	11	8	6
27	10	7	9	7	8	9	10	0	9	8	9	6	9	2	8	4	8	0	8	10	8	11	8	9
28	10	7	9	8	8	9	9	11	9	8	9	5	9	1	8	3	8	0	8	10	8	11	8	7
29	10	6	9	8	8	11	9	11	9	7	9	4	9	0	8	3	8	0	8	9	8	11	8	5
30	10	6	9	8	9	1	9	11	9	6	9	3	9	0	8	3	8	0	8	8	8	10½	8	4

Appendix A, No. 3.

Heights of Water on Lock Sills, December, 1837.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1837.	Errina. Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.		Shannon Bridge. Low. Sill.		Shannon Bridge. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Dec. 1	12	3¼	-	-	12	9	10	11	9	3	10	4	10	10	10	6	10	3
2	12	2	-	-	12	8	10	11	9	3	10	3	10	9	10	4	10	2
3	12	1½	-	-	12	8	10	8	9	2	10	3	10	9	10	4	10	1
4	12	1	-	-	12	8	10	7½	9	3	10	3	10	9	10	3	10	0
5	12	1	-	-	12	7	10	4	9	2	10	3	10	8	10	1	9	11
6	11	11½	-	-	12	7	10	2	9	0	10	2	10	8	10	0	9	10
7	11	10	-	-	12	6	10	0¼	8	11	10	1	10	7	9	11	9	9
8	11	8½	-	-	12	4	10	9	8	10	9	10	10	4	9	11	9	9
9	11	8	-	-	12	2	9	11	8	9	9	10	10	4	9	10	9	9
10	11	6	-	-	12	2	9	8	8	9	9	9	10	3	9	9	9	8
11	11	5	-	-	12	0	9	8	8	8	9	8	10	2	9	7	9	6
12	11	3½	-	-	11	10	9	8	8	8	9	7	10	1	9	6	9	5
13	11	2	-	-	11	8	9	7	8	6	9	7	10	1	9	6	9	4
14	10	10½	-	-	11	5	9	7	8	3	9	5	9	11	9	5	9	3
15	10	10	-	-	11	5	9	9	8	4	9	5	9	11	9	6	9	4
16	10	11	-	-	11	6	9	9½	8	5	9	5	9	11	9	7	9	4
17	10	11½	-	-	11	7	9	10	8	8	9	7	10	1	9	9	9	5
18	10	9	-	-	11	8	10	0	8	7	9	9	10	3	9	9	9	5
19	11	2	-	-	11	10	10	0½	8	11	9	10	10	4	10	3	9	10
20	11	6	-	-	11	11	10	1	9	3	10	3	10	9	10	6	10	1
21	11	7½	-	-	12	2	10	3	9	6	10	8	11	2	10	9	10	4
22	11	9	-	-	12	2	10	6	9	5	10	8	11	2	10	10	10	5
23	11	11	-	-	12	4	10	9	9	6	10	8	11	2	10	9	10	4
24	11	11	-	-	12	5	10	9½	9	4	10	7	11	1	10	7	10	2
25	11	10½	-	-	12	6	10	11	9	5	10	6	11	0	10	7	10	3
26	12	0	-	-	12	7	10	11	9	4	10	6	11	0	10	8	10	4
27	12	2	-	-	12	8	10	9	9	5	10	8	11	2	10	8	10	5
28	12	1½	-	-	12	8	10	6	9	5	10	9	11	1	10	8	10	4
29	12	0½	-	-	12	8	10	5½	9	4	10	6	11	0	10	8	10	4
30	12	0	-	-	12	7	10	8	9	4	10	4	10	10	10	7	10	4
31	12	0	-	-	12	7	10	8	9	4	10	4	10	10	10	6	10	3

1837.	Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.		Cloondrah. Low. Sill.		Cloondrah. Up. Sill.		Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Dec. 1	10	6	9	8	9	1	9	10	9	6	9	3	8	11	8	3	7	11	8	7	8	9	8	3
2	10	6	9	8	9	1	9	10	9	6	9	3	8	10	8	2	7	11	8	5	8	7	8	2
3	10	5	9	8	9	2	9	9	9	3	9	0	8	8	8	0	7	9	8	3	8	6	8	1
4	10	3	9	8	9	1	9	8	9	2	8	10	8	7	8	0	7	7	8	1	8	3	8	0
5	10	1	9	8	9	0	9	7	9	0	8	10	8	5	7	11	7	7	8	0	8	1	7	11
6	10	0	9	8	8	11	9	6	8	11	8	8	8	3	7	10	7	5	7	10	7	10½	7	10
7	10	0	9	8	8	10	9	5	8	9	8	7	8	1	7	9	7	5	7	8	7	8½	7	8
8	9	11	9	6	8	9	9	4	8	8	8	6	8	0	7	8	7	4	7	7	7	6½	7	8
9	9	10	9	5	8	9	9	3	8	7	8	6	7	11	7	8	7	3	7	5	7	4	7	9
10	9	8	9	3	8	8	9	3	8	5	8	6	7	10	7	7	7	2	7	3	7	2	7	8
11	9	8	9	3	8	7	9	2	8	5	8	6	7	8	7	6	7	1	7	1	7	0	7	7
12	9	7	9	2	8	6	8	11	8	4	8	5	7	8	7	5	6	11	6	11	6	10	7	7
13	9	6	9	0	8	5	8	10	8	4	8	5	7	6	7	3	6	10	6	10	6	8	7	6
14	9	6	9	0	8	6	8	11	8	3	8	4	7	4	7	0	7	1	6	6	6	7	7	7
15	9	6	9	0	8	5	8	11	8	3	8	4	7	5	7	1	6	5	6	3	6	7	7	8
16	9	6	8	9	8	5	8	10	8	3	8	3	7	6	7	2	6	5	6	4	6	9	7	9
17	9	6	8	9	8	4	8	10	8	3	8	6	7	8	7	3	6	5	6	6	7	0	7	10
18	9	6	8	9	8	5	9	1	8	4	8	7	7	10	7	5	7	0	7	5	7	4	8	0
19	9	10	9	0	8	5	9	2	8	4	8	7	8	1	7	7	7	2	7	9	7	11½	8	0
20	10	1	9	0	8	6	9	4	8	8	8	10	8	5	7	9	7	6	8	2	8	6	8	2
21	10	2	9	1	8	7	9	7	8	10	9	1	8	9	8	0	7	7	8	6	8	9	8	3
22	10	5	9	3	8	8	9	8	9	5	9	4	8	11	8	1	7	10	8	7	8	10	8	7
23	10	5	9	3	8	8	9	9	9	5	9	4	8	10	8	1	7	10	8	7	8	11	8	8
24	10	6	9	5	8	9	9	10	9	5	9	4	8	11	8	2	7	11	8	8	8	11	8	7
25	10	6	9	6	8	10	10	0	9	6	9	5	9	0	8	3	7	11	8	8	8	11	8	7
26	10	5	9	6	8	11	10	0	9	9	9	5	9	0	8	3	7	10	8	8	8	11	8	6
27	10	6	9	9	8	11	10	0	9	8	9	5	9	0	8	3	7	11	8	8	8	9½	8	5
28	10	6	9	9	8	11	10	0	9	7	9	4	8	11	8	2	7	11	8	6	8	8½	8	4
29	10	7	9	9	8	11	10	0	9	6	9	3	8	11	8	2	7	11	8	4	8	8	8	3
30	10	7	9	9	9	0	10	1	9	6	9	3	8	10	8	2	7	10	8	4	8	7	8	3
31	10	5	9	9	9	0	9	11	9	6	9	3	8	9	8	1	7	9	8	4	8	6	8	2

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Appendix A.
No. 3.

Heights of Water on Lock Sills, January, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina. Up. Sill. Ft.	In.	Cussaan. Low. Sill. Ft.	In.	Killaloe. Up. Sill. Ft.	In.	Hamilton. Low. Sill. Ft.	In.	Hamilton. Up. Sill. Ft.	In.	Banagher. Low. Sill. Ft.	In.	Banagher. Up. Sill. Ft.	In.
Jan. 1	12	0	12	4	12	6	10	6	9	4	10	4	10	10
2	11	11½	12	3	12	6	10	6	9	2	-	-	-	-
3	11	0½	12	2	12	5	10	6	9	1	-	-	-	-
4	11	11	12	1	12	4	10	6	9	1	-	-	-	-
5	11	11	12	0	12	4	10	5	9	1	-	-	-	-
6	11	11	12	0	12	4	10	3½	9	1	-	-	-	-
7	10	10½	11	11	12	3	10	2	9	0	-	-	-	-
8	11	10	11	11	12	3	10	0	9	0	-	-	-	-
9	11	9½	11	10	12	3	9	11	8	11	10	0	10	6
10	11	7	11	9	12	2	9	9	8	10	10	0	10	6
11	11	6	11	10	12	1	9	10	8	9	9	11	10	5
12	11	4½	11	9	12	1	9	7	8	6	9	10	10	4
13	11	2	11	8	11	11	9	6½	8	7	9	9	10	3
14	11	1	11	8	11	10	9	6	8	5	9	8	10	2
15	12	0	11	8	11	8	9	4½	8	5	9	7	10	1
16	12	0	11	8	11	8	-	-	-	-	9	7	10	1
17	11	11	11	1	11	7	-	-	-	-	9	6	10	0
18	11	10½	11	6	11	6	-	-	-	-	9	6	10	0
19	11	8	11	5	11	5	-	-	-	-	9	6	10	0
20	11	8½	11	4	11	4	-	-	-	-	9	6	10	0
21	11	8	11	3	11	3	-	-	-	-	9	5	9	11
22	11	8	11	3	11	3	-	-	-	-	9	4	9	10
23	11	8½	11	3	11	3	-	-	-	-	9	4	9	10
24	11	8½	11	4	11	4	-	-	-	-	9	4	9	10
25	11	8	11	2	11	4	-	-	-	-	9	5	9	11
26	11	8	11	1	11	3	-	-	-	-	-	-	-	-
27	11	9½	11	0	11	3	-	-	-	-	-	-	-	-
28	11	9	11	0	11	3	-	-	-	-	-	-	-	-
29	11	8	11	4	11	4	-	-	-	-	-	-	-	-
30	11	8	11	4	11	4	-	-	-	-	-	-	-	-
31	11	7	11	4	11	4	-	-	-	-	-	-	-	-

1838.	Shannon Bridge. Low. Sill. Ft.	In.	Shannon Bridge. Up. Sill. Ft.	In.	Athlone. Low. Sill. Ft.	In.	Athlone. Up. Sill. Ft.	In.	Lanesborough. Low. Sill. Ft.	In.	Lanesborough. Up. Sill. Ft.	In.
Jan. 1	10	5	10	2	10	4	9	9	8	11	9	11
2	10	4	10	1	10	4	9	9	8	10	9	10
3	10	3	10	1	10	4	9	9	8	11	9	10
4	10	3	10	1	10	4	9	7	9	0	9	9
5	10	3	10	2	10	4	9	7	9	2	9	9
6	10	3	10	1	10	1	9	4	9	3	9	8
7	10	2	10	0	9	10	9	4	9	3	9	7
8	10	1	9	11	9	10	9	4	9	2	9	6
9	10	0	9	10	9	10	9	3	9	1	9	4
10	9	11	9	8	9	10	9	1	8	11	9	2
11	9	11	9	8	9	10	9	1	8	10	9	1
12	9	10	9	7	9	7	9	1	8	9	9	0
13	9	9	9	6	9	7	9	1	8	7	8	11
14	9	6	9	4	9	7	9	1	8	5	8	9
15	9	5	9	3	9	5	9	0	8	3	8	9
16	9	4	9	3	9	4	8	10	8	3	8	8
17	9	4	9	3	9	3	8	10	8	2	8	7
18	9	3	9	2	9	1	8	9	8	1	8	6
19	9	2	9	1	9	1	8	9	8	1	8	5
20	9	1	8	11	9	1	8	9	8	1	8	4
21	9	0	8	10	8	10	8	6	8	1	8	3
22	9	1	8	11	8	9	8	5	8	0	8	4
23	9	2	9	0	8	9	8	5	7	11	8	8
24	9	3	9	0	8	9	8	6	7	10	8	8
25	9	4	9	1	8	9	8	6	7	10	8	6
26	9	5	9	1	8	10	8	6	7	11	8	4
27	9	5	9	2	8	10	8	6	7	10	8	6
28	9	5	9	2	8	10	8	6	7	10	8	6
29	9	4	9	1	8	11	8	6	7	11	8	5
30	9	4	9	1	8	11	8	6	7	11	8	8
31	9	6	9	2	9	2	8	6	7	11	8	9

1838.	Cloondrah. Low. Sill. Ft.	In.	Cloondrah. Up. Sill. Ft.	In.	Rooskey. Low. Sill. Ft.	In.	Rooskey. Up. Sill. Ft.	In.	Jamestown. Low. Sill. Ft.	In.	Jamestown. Up. Sill. Ft.	In.	Battle Bridge. Lower Sill. Ft.	In.	Drumleague. Upper Sill. Ft.	In.
Jan. 1	9	5	9	2	8	9	8	1	7	9	8	4	8	5	8	3
2	9	3	9	0	8	7	8	0	7	7	8	2	8	5	8	3
3	9	2	8	11	8	6	8	0	7	8	8	2	8	5½	8	2
4	9	2	8	11	8	6	8	1	7	8	8	2	8	4½	8	2
5	9	2	8	11	8	6	8	0	7	8	8	2	8	5	8	1
6	9	2	8	11	8	4	8	0	7	8	8	1	8	3½	8	0
7	8	0	8	10	8	3	7	11	7	8	8	0	8	1½	7	11
8	8	10	8	10	8	2	7	10	7	6	8	1	8	0	7	10
9	8	10	8	10	8	0	7	9	7	6	7	9	7	10	7	9
10	8	9	8	9	7	11	7	8	7	5	7	8	7	9	7	8
11	8	9	8	9	7	10	7	7	7	4	7	8	7	6½	7	6
12	8	8	8	8	7	9	7	7	7	2	7	7	7	4	7	4
13	8	8	8	8	7	7	7	5	7	2	7	2	7	3	7	2
14	8	8	8	8	7	7	7	5	7	1	7	1	7	1	7	0
15	8	6	8	7	7	6	7	4	7	0	7	0	6	11	6	10
16	8	3	8	5	7	5	7	3	6	11	7	0	6	9	6	9
17	7	11	8	3	7	4	7	2	6	8	6	8	6	7½	6	9
18	7	11	8	3	7	3	7	1	6	8	6	8	6	6	6	8
19	7	10	8	2	7	2	7	0	6	7	6	7	6	4	6	8
20	7	10	8	2	7	1	6	11	6	6	6	6	6	3	6	7
21	7	9	8	1	7	0	6	10	6	6	6	4	6	2	6	9
22	7	9	8	1	7	3	6	9	6	6	6	2	6	5	6	10
23	7	9	8	1	7	6	7	0	6	9	6	6	7	1	6	3
24	7	10	8	2	7	2	7	3	7	1	6	11	7	6	6	7
25	7	10	8	2	7	6	7	2	7	1	6	11	7	6½	6	8
26	7	10	8	2	7	3	7	2	7	0	6	10	7	10	6	7
27	7	10	8	2	7	4	7	3	6	11	6	9	7	10	6	7
28	7	9	8	1	7	5	7	4	6	11	6	9	7	7	6	6
29	7	11	8	3	7	7	7	5	7	1	7	1	7	5½	6	5
30	8	0	8	3	7	7	7	5	7	2	7	6	7	5½	6	4
31	8	1	8	5	7	9	7	6	7	2	7	6	7	5	6	2

Appendix A.
No. 3.

Heights of Water on Lock Sills, February, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Feb. 1	11	7	11	5	11	5	-	-	-	-	-	-	-	-	9	6	9	3	9	0	8	6	8	0	8	10	8	3	8	9	8	0	7	7	7	2	7	9	7	7	7	1
2	11	7	11	5	11	5	-	-	-	-	-	-	-	-	9	6	9	3	9	2	8	5	8	0	9	0	8	5	8	9	8	0	7	7	7	2	7	8	7	7	7	1
3	11	6	11	6	11	6	-	-	-	-	-	-	-	-	9	7	9	4	9	2	8	8	8	0	9	0	8	5	8	9	7	11	7	8	7	3	7	8	7	6	6	10
4	11	6	11	6	11	6	-	-	-	-	-	-	-	-	9	7	9	3	9	2	8	8	8	1	8	11	8	5	8	9	7	10	7	8	7	4	7	6	7	5	6	11
5	11	6	11	6	11	6	-	-	-	-	-	-	-	-	9	6	9	2	9	1	8	8	8	1	8	10	8	4	8	7	7	9	7	6	7	2	7	4	7	4	6	10
6	11	6	11	1	11	7	-	-	-	-	-	-	-	-	9	6	9	1	9	1	8	8	8	1	8	9	8	1	8	4	7	8	7	5	7	2	7	2	7	2	6	10
7	11	5½	11	8	11	8	-	-	-	-	-	-	-	-	9	5	9	2	9	1	8	8	8	0	8	7	8	1	8	4	7	7	7	5	7	1	7	1	7	0	6	10
8	11	6	11	8	11	8	-	-	-	-	-	-	-	-	9	6	9	3	9	5	8	6	8	1	9	0	8	1	8	4	8	1	7	8	7	3	7	8	7	10	7	1
9	11	7	11	9	11	9	-	-	-	-	-	-	-		9	11	9	8	9	6	8	6	8	2	9	4	8	2	8	6	8	5	7	10	7	4	7	11	7	11	7	5
10	11	6½	11	10	11	10	-	-	-	-	-	-	-	-	10	0	9	10	9	11	9	0	8	2	9	7	8	2	8	5	8	6	7	11	7	4	7	11	7	11	7	4
11	11	6	11	10	11	10	-	-	-	-	-	-	-	-	10	1	9	0	10	0	9	1	8	4	9	5	8	3	8	8	8	5	7	11	7	3	7	10	7	10	7	3
12	11	6	11	11	11	11	-	-	-	-	-	-	-	-	10	1	9	9	9	8	9	1	8	5	9	4	8	2	8	8	8	4	7	10	7	3	7	9	7	8½	7	2
13	11	5	11	11	11	11	-	-	-	-	-	-	-	-	9	11	9	7	9	9	9	1	8	6	9	3	8	1	8	8	8	2	7	9	7	4	7	8	7	7	7	2
14	11	5	11	9	11	9	-	-	-	-	-	-	-	-	9	8	9	5	9	10	9	1	8	9	9	0	8	1	8	8	7	8	7	7	7	4	7	7	7	5½	7	1
15	11	5	11	8	11	8	-	-	-	-	-	-	-	-	9	7	9	4	9	10	8	11	8	5	8	11	8	0	8	7	7	8	7	6	7	4	7	4	7	5½	6	0
16	11	7	11	7	11	7	-	-	-	-	-	-	-	-	9	7	9	4	9	10	8	11	8	3	8	9	8	0	8	7	7	8	7	8	7	5	7	5	7	5	6	11
17	11	6½	11	6	11	6	-	-	-	-	-	-	-	-	9	8	9	5	9	3	8	10	8	1	8	6	8	0	8	7	7	10	7	8	7	4	7	4	7	4	6	10
18	11	6½	11	6	11	6	-	-	-	-	-	-	-	-	9	8	9	5	9	2	8	10	8	1	8	8	8	3	8	5	7	10	7	7	7	3	7	3	7	1½	6	9
19	11	6	11	7	11	7	9	4	8	6	9	4	9	10	9	9	9	6	9	2	8	10	8	0	8	9	8	3	8	5	7	10	7	6	7	2	7	2	7	9	6	9
20	11	6	11	8	11	8	9	4	8	7	9	4	9	10	9	9	9	6	9	4	8	10	8	0	8	10	8	4	8	6	7	10	7	5	7	2	7	2	7	0	6	11
21	11	5	11	9	11	9	9	8	8	10	9	6	10	0	9	11	9	7	9	5	8	10	8	1	8	10	8	4	8	6	7	9	7	4	7	2	7	2	6	11	6	11
22	11	4½	11	9	11	9	9	6	8	11	9	7	10	1	9	11	9	7	9	5	8	9	8	1	8	9	8	4	8	6	7	8	7	4	7	0	7	2	6	10	6	10
23	11	4	11	10	11	10	9	6½	8	11	9	7	10	1	9	10	9	7	9	5	8	9	8	2	8	9	8	4	8	6	7	7	7	2	7	0	6	11	6	10	6	10
24	11	4	11	10	11	10	9	6	8	11	9	7	10	1	10	0	9	8	9	6	8	10	8	1	8	9	8	5	8	7	7	8	7	2	7	0	7	0	6	10	6	11
25	11	4	11	11	11	11	9	7	9	0	9	8	10	2	10	1	9	9	9	8	8	11	8	1	8	10	8	5	8	7	7	8	7	2	6	11	7	0	6	11½	7	1
26	11	5	11	11	11	11	9	7¼	9	1	9	9	10	3	10	3	9	11	9	10	9	0	8	3	8	11	8	5	8	8	7	10	7	2	7	1	7	0½	7	1½	7	2
27	11	5	11	11	11	11	9	10	9	1	9	11	10	5	10	4	10	6	9	10	9	1	8	4	9	0	8	5	8	8	7	10	7	4	7	1	7	2	7	2	7	3
28	11	4½	11	0	12	0	9	11	9	1	9	11	10	5	10	4	10	0	9	11	9	1	8	5	9	0	8	5	8	8	7	10	7	4	7	1	7	2	7	3	7	3

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Appendix A. No. 3.

Heights of Water on Lock Sills, March, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina: Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.		Shannon Bridge. Low. Sill.		Shannon Bridge. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
March 1	11	4	12	1	12	1	9	11	9	3	9	11	10	5	10	3	9	11
2	11	3½	12	1	12	1	9	11	9	2	9	10	10	4	10	2	9	10
3	11	3	12	0	12	1	10	0	9	1	9	9	10	3	10	0	9	9
4	11	2	12	0	12	1	10	0	8	10	9	9	10	3	9	10	9	8
5	11	2	11	11	12	0	9	9	8	10	9	10	10	4	9	9	9	6
6	11	2½	11	11	12	0	9	9	8	7	9	10	10	4	9	7	9	4
7	11	2	11	11	12	0	9	8	8	8	9	9	10	3	9	8	9	5
8	11	2	11	11	12	0	9	10	8	10	9	8	10	2	9	9	9	6
9	11	1	11	10	11	11	9	9	8	10	9	7	10	1	9	9	9	6
10	11	1½	11	10	11	11	9	9	8	9	9	7	10	1	10	0	9	7
11	11	2	11	10	11	11	9	9	8	10	9	8	10	2	10	1	9	8
12	11	3½	11	9	12	0	9	8	8	11	9	10	10	4	9	11	9	8
13	11	4	11	9	12	0	9	8	8	11	9	11	10	5	9	11	9	8
14	11	4½	11	9	12	0	10	0	9	1	10	0	10	6	10	0	9	9
15	11	6	11	9	12	0	10	0	9	11	10	1	10	7	10	1	9	10
16	11	6	11	9	12	0	10	0	9	1	10	1	10	7	10	2	9	11
17	11	6½	12	0	12	0	10	1	9	1	10	2	10	8	10	2	9	11
18	11	7	12	0	12	0	10	1	9	1	10	2	10	8	10	3	10	0
19	11	7½	12	2	12	2	10	1	9	1	10	3	10	9	10	2	9	11
20	11	8	12	3	12	2	10	3½	9	2	10	3	10	9	10	4	10	1
21	11	11½	12	5	12	4	10	4	9	4	10	4	10	10	10	5	10	2
22	12	0	12	5	12	4	10	2	9	5	10	4	10	10	10	7	10	3
23	11	11	12	5	12	5	10	4	9	4	10	5	10	11	10	7	10	3
24	11	11	12	5	12	6	10	3	9	3	10	6	11	0	10	5	10	2
25	11	11½	12	4	12	6	10	3	9	1	10	6	11	0	10	4	10	1
26	11	9½	12	4	12	4	10	4	9	1	10	6	11	0	10	2	10	0
27	11	9	12	3	12	3	10	1	9	0	10	4	10	10	10	1	9	11
28	11	9	12	2	12	3	10	1	9	0	10	2	10	8	10	0	9	10
29	11	8¾	12	0	12	3	10	0	8	10	10	0	10	6	9	11	9	10
30	11	8	11	11	12	2	10	0	8	10	9	10	10	4	9	10	9	9
31	11	6	11	9	12	2	9	9	8	9	9	9	10	3	9	9	9	7

1838.	Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.		Cloondrah. Low. Sill.		Cloondrah. Up. Sill.		Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
March 1	9	11	9	1	8	5	9	0	8	4	8	8	7	9	7	6	7	1	7	3	7	3	7	2
2	9	10	9	1	8	5	9	0	8	4	8	7	7	9	7	6	7	1	7	3	7	4	7	1
3	9	10	9	1	8	5	8	11	8	4	8	7	7	9	7	6	7	1	7	2	7	4	7	1
4	9	9	9	1	8	5	8	11	8	4	8	7	7	9	7	6	7	1	7	2	7	3	6	11
5	9	7	9	1	8	6	8	10	8	3	8	7	7	9	7	7	7	1	7	2	7	2½	6	10
6	9	7	9	1	8	5	9	0	8	3	8	7	7	10	7	6	7	1	7	3	7	7	6	11
7	9	7	9	1	8	5	9	0	8	3	8	7	7	10	7	6	7	1	7	4	7	6	7	2
8	9	7	9	0	8	4	8	11	8	4	8	8	7	9	7	6	7	1	7	4	7	5½	7	3
9	9	7	9	0	8	4	8	11	8	4	8	8	7	9	7	5	7	2	7	5	7	5	7	2
10	9	7	9	0	8	5	9	0	8	5	8	9	7	9	7	6	7	4	7	8	7	7	7	5
11	9	7	9	0	8	4	9	1	8	7	8	10	8	1	7	8	7	5	7	10	8	0	7	10
12	9	7	9	0	8	5	9	3	8	10	9	0	8	3	7	10	7	6	8	0	8	2	8	1
13	9	10	9	1	8	7	9	5	8	11	8	11	8	5	7	10	7	6	8	1	8	4½	8	2
14	10	1	9	1	8	8	9	6	9	0	9	6	8	7	8	0	7	7	8	2	8	7	8	3
15	9	10	9	3	8	7	9	7	9	3	9	10	8	8	8	0	7	6	8	3	8	5	8	3
16	9	10	9	3	8	7	9	7	9	3	9	10	8	8	8	1	7	6	8	3	8	6	8	1
17	9	10	9	4	8	7	9	6	9	3	9	10	8	8	8	1	7	8	8	4	8	6	8	2
18	10	1	9	6	8	9	9	8	9	4	9	11	8	7	8	1	7	8	8	4	8	5	8	1
19	10	1	9	6	8	9	9	7	9	4	9	11	8	7	8	0	7	8	8	3	8	4½	8	6
20	9	10	10	3	8	9	9	8	9	11	10	6	8	11	8	3	8	0	8	7	8	9	8	7
21	10	1	9	11	8	9	10	0	9	8	10	0	9	0	8	3	7	9	8	9	8	9	8	7
22	10	1	10	0	8	10	9	10	9	7	9	8	8	10	8	3	7	9	8	8	8	8	8	5
23	10	1	9	9	8	11	9	11	9	6	9	8	8	10	8	3	8	0	8	7	8	7	8	4
24	10	1	9	9	9	0	9	9	9	6	9	8	8	9	8	2	8	0	8	4	8	6½	8	2
25	10	1	9	9	9	0	9	9	9	5	9	6	8	8	8	1	7	8	8	4	8	4	8	0
26	10	1	9	6	9	0	9	8	9	3	9	4	8	5	8	0	7	8	8	2	8	3	7	11
27	10	1	9	6	8	11	9	7	9	0	9	0	8	5	8	0	7	7	8	0	8	1	8	0
28	10	1	9	6	8	11	9	6	8	11	8	9	8	3	7	11	7	6	8	1	7	11½	7	10
29	9	10	9	6	8	10	9	4	8	9	8	8	8	1	7	10	7	5	7	8	7	10	7	9
30	9	10	9	6	8	9	9	3	8	8	8	7	8	0	7	9	7	4	7	7	7	7½	7	7
31	9	9	9	5	8	8	9	2	8	6	8	6	7	11	7	8	7	4	7	7	7	6	7	6

Appendix A.
No. 3.

Heights of Water on Lock Sills, April, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina. Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.		Shannon Bridge. Low. Sill.		Shannon Bridge. Up Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
April 1	11	4	11	8	12	0	9	9	8	7	9	9	10	3	9	8	9	6
2	11	4	11	6	11	11	9	7	8	7	9	8	10	2	9	6	9	5
3	11	2	11	4	11	9	9	6	8	6	9	8	10	2	9	4	9	4
4	11	0	11	2	11	9	9	5	8	5	9	7	10	1	9	4	9	4
5	10	8	11	1	11	7	9	5	8	4	9	6	10	0	9	3	9	3
6	10	9	11	0	11	7	9	5	8	5	9	6	10	0	9	2	9	2
7	10	11	11	1	11	6	9	5	8	5	9	6	10	0	9	4	9	3
8	10	11½	11	1	11	6	-	-	-	-	9	10	10	4	9	7	9	5
9	10	10½	11	1	11	6	-	-	-	-	9	9	10	3	9	7	9	3
10	10	11	11	1	11	6	9	2	8	8	9	9	10	3	9	7	9	4
11	10	11	11	0	11	6	9	5	8	3	9	9	10	3	9	7	9	4
12	10	10¾	11	1	11	6	9	5	8	10	9	9	10	3	9	8	9	5
13	10	11	11	1	11	6	9	3½	8	8	9	8	10	2	9	7	9	4
14	10	10½	11	0	11	6	9	3	8	7	9	8	10	2	9	6	9	3
15	10	9½	11	0	11	6	9	3	8	5	9	8	10	2	9	5	9	2
16	10	9½	11	0	11	6	9	3	8	5	9	9	10	3	9	4	9	1
17	10	9	10	11	11	5	9	3	8	5	9	8	10	2	9	3	9	0
18	10	9	10	10	11	4	9	0	8	5	9	6	10	0	9	2	8	11
19	10	7½	10	8	11	3	8	11	8	4	9	4	9	10	9	0	8	10
20	10	6	10	6	11	1	8	10	8	2	9	3	9	9	8	11	8	10
21	10	3	10	4	10	11	8	9½	8	2	9	2	9	8	8	11	8	9
22	10	5	10	6	10	11	8	9	8	2	9	2	9	8	9	0	8	9
23	10	3	10	5	10	11	8	10	8	0	9	4	9	10	9	0	8	10
24	10	5	10	7	10	11	8	7¼	8	3	9	4	9	10	8	11	8	9
25	10	5	10	6	11	0	8	7	8	3	9	5	9	11	9	0	8	10
26	10	4½	10	5	11	0	8	8	8	4	9	5	9	11	8	11	8	9
27	10	4	10	4	10	11	8	8	8	3	9	6	10	0	8	11	8	9
28	10	3	10	4	10	10	8	7	8	2	9	4	9	10	8	10	8	8
29	10	2	10	3	10	10	8	6	8	0	9	4	9	10	8	9	8	6
30	10	1¼	10	2	10	9	8	7	7	11	9	4	9	10	8	8	8	5

1838.	Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.		Cloondrah. Low. Sill.		Cloondrah. Up. Sill.		Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In
April 1	9	8	9	4	8	8	9	0	8	1	8	6	7	9	7	6	7	2	7	5	7	4	7	5
2	9	7	9	4	8	7	9	0	8	1	8	6	7	7	7	5	7	0	7	2	7	1	7	4
3	9	4	9	4	8	6	8	11	8	1	8	4	7	6	7	3	6	10	7	1	7	0	7	2
4	9	4	9	0	8	5	8	10	8	1	8	4	7	5	7	2	6	10	6	11	6	10	7	1
5	9	4	8	10	8	4	8	9	8	0	8	3	7	4	7	1	6	10	6	10	6	8	7	1
6	9	4	8	10	8	2	8	7	8	0	8	3	7	4	7	1	6	8	6	9	6	9	7	3
7	9	4	8	9	8	1	8	7	7	11	8	2	7	4	7	1	6	8	7	0	6	11	7	5
8	9	4	8	9	8	0	8	9	8	4	8	8	7	6	7	3	6	9	7	2	7	4	7	9
9	9	4	8	9	8	1	8	10	8	4	8	8	7	8	7	2	7	2	7	4	7	5	7	6
10	9	5	8	9	8	2	8	10	8	5	8	9	7	9	7	3	7	4	7	5	7	7	7	7
11	9	6	8	9	8	3	8	10	8	5	8	9	7	9	7	3	7	4	7	5	7	7	7	7
12	9	6	8	9	8	2	8	9	8	4	8	8	7	8	7	4	7	4	7	4	7	4	7	8
13	9	4	8	9	8	1	8	8	8	4	8	8	7	7	7	3	7	4	7	4	7	3½	7	6
14	9	2	8	9	8	0	8	9	8	4	8	8	7	6	7	4	7	3	7	3	7	3	7	6
15	9	2	8	9	8	0	8	8	8	5	8	9	7	6	7	5	7	3	7	2	7	4	7	5
16	9	2	8	9	7	11	8	7	8	5	8	9	7	5	7	4	7	2	7	2	7	2	7	7
17	9	2	8	9	7	11	8	6	8	4	8	8	7	4	7	3	7	2	7	2	7	1	7	7
18	9	1	8	8	7	9	8	5	8	4	8	8	7	4	7	2	6	10	7	1	7	0	7	5
19	8	10	8	6	7	9	8	4	8	2	8	6	7	3	7	1	6	10	7	0	6	10½	7	4
20	8	10	8	6	7	10	8	4	8	1	8	5	7	2	7	0	6	10	6	10	6	9½	7	2
21	8	10	8	6	7	10	8	3	7	10	8	3	7	1	6	11	6	9	6	9	6	9	7	1
22	8	10	8	6	7	8	8	3	7	8	8	1	7	1	6	11	6	9	6	9	6	10	7	1
23	8	10	8	4	7	8	8	3	7	7	8	1	7	0	7	2	6	8	6	9	6	9	7	2
24	8	10	8	4	7	7	8	3	7	7	8	1	7	2	6	11	6	7	6	10	6	8½	7	3
25	8	8	8	4	7	7	8	3	7	6	8	0	7	1	6	10	6	6	6	9	6	8	7	2
26	8	7	8	4	7	8	8	2	7	6	8	0	7	1	6	10	6	6	6	9	6	7	7	1
27	8	7	8	3	7	7	8	1	7	5	7	11	7	0	6	9	6	5	6	8	6	5	7	0
28	8	6	8	1	7	6	8	0	7	5	7	11	6	11	6	9	6	5	6	6	6	3½	6	11
29	8	4	8	1	7	6	7	11	7	4	7	10	6	11	6	8	6	5	6	4	6	3	6	11
30	8	4	8	1	7	5	7	10	7	4	7	10	6	10	6	8	6	4	6	3	6	2	6	10

Appendix A. No. 3.

Heights of Water on Lock Sills, May, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina. Up. Sill.		Cussaan. Low. Sill.		Killaloe. Up. Sill.		Hamilton. Low. Sill.		Hamilton. Up. Sill.		Banagher. Low. Sill.		Banagher. Up. Sill.		Shannon Bridge. Low. Sill.		Shannon Bridge. Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
May 1	10	1	10	1	10	9	8	3½	7	10	9	2	9	8	8	6	8	4
2	10	0½	10	1	10	9	8	3	7	9	9	0	9	6	8	5	8	3
3	10	0½	10	1	10	9	8	3	7	10	9	0	9	6	8	6	8	4
4	10	0	10	0	10	8	8	4	7	11	9	0	9	6	8	6	8	4
5	9	11½	10	0	10	8	8	2½	7	10	8	11	9	5	8	5	8	3
6	9	11½	9	11	10	7	8	2½	7	9	8	10	9	4	8	4	8	2
7	9	11	9	10	10	7	8	2½	7	9	8	9	9	3	8	4	8	1
8	9	10½	9	9	10	6	8	1	7	7	8	9	9	3	8	3	8	0
9	9	10	9	8	10	6	8	0	7	7	8	8	9	2	8	1	7	11
10	9	9	9	7	10	5	7	10	7	6	8	7	9	1	8	0	7	11
11	9	7½	9	6	10	4	7	9½	7	4	8	6	9	0	7	10	7	10
12	9	7	9	5	10	3	7	8½	7	4	8	6	9	0	7	9	7	9
13	9	6	9	4	10	3	7	5½	7	3	8	6	9	0	7	8	7	8
14	9	4¼	9	3	10	1	7	4	7	4	8	4	8	10	7	7	7	6
15	9	3½	9	2	10	0	7	4	7	2	8	4	8	10	7	6	7	5
16	9	2½	9	0	9	11	7	4	7	2	8	3	8	9	7	5	7	4
17	9	1	8	11	9	10	7	3	7	2	8	2	8	8	7	4	7	3
18	9	0	8	10	9	10	7	2½	7	1	8	1	8	7	7	3	7	2
19	9	0	8	9	9	9	7	1½	7	0	8	0	8	6	7	3	7	2
20	8	11	8	8	9	9	7	2	6	11	8	0	8	6	7	2	7	1
21	8	11	8	7	9	8	7	0½	6	11	7	11	8	5	7	0	6	11
22	8	10	8	5	9	8	7	1	7	0	7	10	8	4	7	0	6	11
23	8	10	8	4	9	6	7	0	6	11	7	10	8	4	7	0	6	10
24	8	9	8	3	9	6	6	11½	6	11	7	9	8	3	6	11	6	10
25	8	8	8	2	9	5	6	10	6	9	7	8	8	2	6	10	6	9
26	8	7½	8	1	9	4	6	9	6	9	7	7	8	1	6	9	6	8
27	8	7½	8	0	9	4	6	5	6	8	7	6	8	0	6	9	6	7
28	8	7	8	0	9	3	6	5	6	8	7	6	8	0	6	8	6	6
29	8	6	7	11	9	3	6	6	6	8	7	6	8	0	6	8	6	6
30	8	6	7	10	9	2	6	8	6	9	7	6	8	0	6	9	6	7
31	8	5	7	10	9	0	6	7	6	4	7	6	8	0	6	10	6	8

1838.	Athlone. Low. Sill.		Athlone. Up. Sill.		Lanesborough. Low. Sill.		Lanesborough. Up. Sill.		Cloondrah. Low. Sill.		Cloondrah. Up. Sill.		Rooskey. Low. Sill.		Rooskey. Up. Sill.		Jamestown. Low. Sill.		Jamestown. Up. Sill.		Battle Bridge. Lower Sill.		Drumleague. Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
May 1	8	1	8	0	7	4	7	9	7	4	7	10	6	10	6	8	6	3	6	2	6	1	6	9
2	8	1	8	0	7	4	7	9	7	3	7	9	6	9	6	7	6	2	6	1	5	11½	6	7
3	8	1	8	0	7	3	7	9	7	2	7	9	6	8	6	6	6	1	6	0	6	0	6	7
4	8	1	8	0	7	3	7	9	7	2	7	7	6	9	6	5	6	0	6	0	6	0	6	7
5	8	1	8	0	7	2	7	8	7	1	7	6	6	8	6	5	6	0	6	0	5	10	6	6
6	7	11	8	0	7	1	7	7	7	0	7	5	6	7	6	5	5	11	5	11	5	9½	6	6
7	7	10	7	10	7	0	7	7	6	11	7	4	6	6	6	4	5	11	5	10	5	8½	6	5
8	7	10	7	10	6	11	7	6	6	11	7	4	6	5	6	3	5	10	5	9	5	7	6	5
9	8	1	7	8	6	10	7	5	6	9	7	2	6	4	6	2	5	8	5	8	5	6	6	4
10	7	11	7	8	6	10	7	5	6	8	7	1	6	4	6	2	5	7	5	7	5	4½	6	3
11	7	10	7	8	6	10	7	5	6	7	7	0	6	3	6	1	5	6	5	6	5	4	6	2
12	7	7	7	6	6	9	7	4	6	7	7	0	6	1	6	0	5	4	5	5	5	4	6	2
13	7	7	7	6	6	8	7	3	6	7	7	0	6	0	5	11	5	3	5	4	5	1	6	2
14	7	4	7	6	6	7	7	2	6	4	6	11	5	11	5	10	5	2	5	3	5	0½	6	1
15	7	1	7	5	6	6	7	1	6	4	6	11	5	10	5	9	5	2	5	2	5	0	6	1
16	7	1	7	3	6	5	7	0	6	3	6	10	5	10	5	9	5	1	5	0	4	11½	6	1
17	6	11	7	3	6	5	6	11	6	3	6	10	5	10	5	8	5	1	5	0	4	11	6	0
18	6	11	7	1	6	5	6	10	6	2	6	9	5	9	5	7	5	1	5	0	4	10	5	11
19	6	11	7	1	6	4	6	10	6	1	6	8	5	8	5	5	5	0	5	0	4	9	5	11
20	6	11	7	1	6	4	6	10	6	1	6	8	5	8	5	6	5	0	4	11	4	9	5	11
21	6	10	7	0	6	3	6	9	6	0	6	7	5	8	5	5	5	0	4	11	4	8½	5	10
22	6	10	7	0	6	3	6	8	6	0	6	7	5	8	5	5	4	11	4	10	4	7	5	10
23	6	7	6	9	6	2	6	8	5	11	6	6	5	7	5	4	4	10	4	9	4	6½	5	11
24	6	7	6	9	6	2	6	7	5	11	6	6	5	6	5	3	4	9	4	8	4	7	5	10
25	6	7	6	9	6	2	6	7	5	10	6	6	5	6	5	2	4	8	4	7	4	6	5	9
26	6	7	6	9	5	11	6	6	5	10	6	6	5	5	5	1	4	8	4	7	4	6	5	9
27	6	7	6	9	5	11	6	6	5	9	6	5	5	5	5	1	4	8	4	7	4	6	5	9
28	6	7	6	9	5	10	6	5	5	8	6	4	5	4	5	1	4	8	4	7	4	5	5	8
29	6	5	6	9	5	10	6	4	5	8	6	4	5	3	5	1	4	7	4	6	4	5	5	8
30	6	3	6	9	5	9	6	3	5	8	6	4	5	3	5	1	4	7	4	6	4	4	5	8
31	6	2	6	9	5	9	6	3	5	8	6	4	5	3	5	1	4	6	4	6	4	4	5	8

Appendix A.
No. 3.

Heights of Water on Lock Sills, June, 1838.

TABLE of the HEIGHTS of WATER upon the LOCKSILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.				Athlone.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
June 1	8	5	7	10	9	0	6	7	6	9	7	7	8	1	6	11	6	9	6	1	6	7
2	8	5	7	10	9	0	6	7	6	11	7	8	8	2	7	0	6	9	6	4	6	7
3	8	5½	7	10	9	0	6	8	6	10	7	8	8	2	7	0	6	10	6	6	6	9
4	8	6	7	10	9	0	6	8	6	10	7	8	8	2	7	0	6	10	6	6	6	9
5	8	6	7	10	9	0	6	6¼	6	10	7	6	8	0	7	0	6	9	6	6	6	9
6	8	5½	7	10	9	0	6	8	6	10	7	6	8	0	7	0	6	8	6	7	6	9
7	8	5	7	9	8	11	6	6	6	10	7	6	8	0	7	0	6	8	6	7	6	9
8	8	4½	7	9	8	11	6	6	6	10	7	5	7	11	6	11	6	7	6	4	6	6
9	8	4	7	8	8	10	6	6¼	6	7	7	4	7	10	6	11	6	7	6	4	6	6
10	8	4½	7	8	8	10	6	5	6	7	7	4	7	10	6	10	6	6	6	4	6	6
11	8	4½	7	8	8	10	6	4	6	9	7	2	7	8	6	10	6	6	6	2	6	6
12	8	4½	7	7	8	9	6	4	6	7	7	2	7	8	6	9	6	6	6	1	6	6
13	8	4	7	7	8	9	6	4	6	7	7	1	7	7	6	8	6	5	6	1	6	5
14	8	3½	7	7	8	9	6	4	6	7	7	1	7	7	6	8	6	5	6	1	6	5
15	8	3	7	6	8	8	6	4	6	7	7	0	7	6	6	7	6	5	5	11	6	3
16	8	3	7	6	8	8	6	3	6	5	7	0	7	6	6	7	6	4	5	11	6	3
17	8	3	7	6	8	8	6	3	6	5	7	0	7	6	6	6	6	3	5	11	6	3
18	8	3	7	5	8	8	6	3	6	4	7	0	7	6	6	6	6	3	5	11	6	3
19	8	2½	7	5	8	8	6	4	6	5	7	0	7	6	6	6	6	3	6	1	6	3
20	8	2	7	4	8	8	6	3	6	4	7	0	7	6	6	6	6	3	6	2	6	0
21	8	2	7	4	8	7	6	5	6	5	7	0	7	6	6	7	6	4	6	2	6	0
22	7	10½	7	4	8	7	6	5	6	5	7	0	7	6	6	7	6	3	6	2	6	0
23	7	11	7	3	8	7	6	3	6	5	7	0	7	6	6	8	6	4	6	0	6	0
24	7	11	7	3	8	6	6	2	6	4	7	0	7	6	6	6	6	3	5	11	6	0
25	7	11½	7	3	8	6	6	0	6	5	7	2	7	8	6	5	6	2	5	11	6	0
26	7	11	7	2	8	6	6	0	6	4	7	2	7	8	6	5	6	2	5	11	6	0
27	7	10	7	2	8	6	6	1	6	4	7	2	7	8	6	6	6	3	5	10	6	0
28	7	10	7	2	8	6	6	1	6	4	7	2	7	8	6	6	6	3	5	10	6	0
29	7	11	7	1	8	6	6	0	6	5	7	2	7	8	6	7	6	3	5	10	6	0
30	8	0	7	1	8	6	6	1	6	6	7	2	7	8	6	8	6	3	5	10	6	0

1838.	Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
June 1	5	10	6	4	5	8	6	5	5	3	5	1	4	6	4	6	4	4	5	8
2	5	10	6	3	5	8	6	5	5	3	5	1	4	6	4	5	4	4	5	7
3	5	10	6	3	5	8	6	5	5	3	5	0	4	6	4	5	4	3½	5	7
4	5	10	6	3	5	8	6	5	5	3	5	0	4	5	4	5	4	3½	5	8
5	5	10	6	2	5	7	6	5	5	3	5	0	4	5	4	5	4	3	5	9
6	5	9	6	2	5	7	6	5	5	2	5	0	4	5	4	5	4	2½	5	8
7	5	9	6	1	5	7	6	5	5	1	5	0	4	5	4	5	4	1½	5	8
8	5	8	6	1	5	7	6	5	5	1	4	11	4	5	4	4	4	1	5	8
9	5	8	6	2	5	7	6	5	5	1	4	10	4	5	4	4	4	1½	5	9
10	5	8	6	2	5	7	6	5	5	1	4	11	4	4	4	3	4	1	5	9
11	5	8	6	3	5	7	6	5	5	1	4	10	4	4	4	3	4	0½	5	8
12	5	9	6	3	5	6	6	4	5	0	4	10	4	4	4	3	4	0½	5	8
13	5	9	6	3	5	6	6	4	5	0	4	9	4	4	4	3	4	0½	5	8
14	5	9	6	2	5	5	6	4	5	0	4	9	4	3	4	2	4	0	5	7
15	5	10	5	11	5	5	6	4	5	0	4	9	4	3	4	2	4	0	5	7
16	5	10	5	11	5	5	6	4	5	0	4	9	4	3	4	2	4	0	5	7
17	5	8	5	11	5	5	6	4	5	0	4	9	4	3	4	1	4	0	5	6
18	5	7	5	11	5	5	6	4	5	0	4	9	4	3	4	1	3	11	5	6
19	5	7	5	11	5	5	6	4	4	11	4	9	4	3	4	1	3	11	5	5
20	5	6	5	10	5	5	6	4	4	11	4	8	4	2	4	0	3	11	5	4
21	5	6	5	10	5	5	6	4	4	10	4	8	4	2	4	0	4	0	5	5
22	5	5	5	10	5	5	6	4	4	11	4	9	4	2	4	0	4	0	5	6
23	5	5	5	11	5	5	6	4	4	11	4	8	4	2	3	0	4	0	5	7
24	5	5	5	11	5	4	6	5	4	11	4	8	4	2	4	1	4	0	5	8
25	5	5	5	10	5	4	6	5	4	11	4	8	4	2	4	1	4	0	5	7
26	5	5	5	10	5	4	6	5	4	10	4	7	4	2	4	0	3	11½	5	7
27	5	4	5	9	5	4	6	5	4	11	4	8	4	2	4	0	3	11	5	6
28	5	4	5	9	5	4	6	5	4	11	4	8	4	2	4	0	3	11½	5	7
29	5	4	5	9	5	3	6	5	4	11	4	8	4	2	4	0	3	11½	5	7
30	5	4	5	9	5	3	6	5	4	11	4	8	4	2	4	0	3	11½	5	6

Appendix A.
No. 3.

Heights of Water on Lock Sills, July, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina.		Cussaan.		Killaloe.		Hamilton.				Banagher.				Shannon Bridge.			
	Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July 1	8	0	7	1	8	6	6	1	6	7	7	2	7	8	6	8	6	3
2	8	0	7	1	8	6	6	0½	6	7	7	2	7	8	6	8	6	3
3	8	0	7	2	8	6	6	1½	6	6	7	3	7	9	6	8	6	3
4	7	11½	7	2	8	6	6	1½	6	6	7	3	7	9	6	7	6	2
5	7	11	7	2	8	6	6	1	6	6	7	3	7	9	6	6	6	1
6	8	0	7	2	8	7	6	2	6	6	7	4	7	10	6	6	6	1
7	8	0	7	3	8	7	6	2	6	4	7	4	7	10	6	6	6	1
8	7	11½	7	3	8	7	6	3	6	2	7	4	7	10	6	5	6	0
9	7	10½	7	4	8	7	6	4	6	4	7	4	7	10	6	5	6	1
10	8	0	7	5	8	7	6	4	6	5	7	4	7	10	6	6	6	2
11	8	1	7	6	8	7	6	3½	6	4	7	5	7	11	6	7	6	3
12	8	0	7	6	8	8	6	6	6	8	7	5	7	11	6	9	6	4
13	8	1	7	5	8	8	6	6	6	9	7	6	8	0	6	10	6	5
14	8	1	7	6	8	8	6	9	6	11	7	6	8	0	7	1	6	8
15	8	2	7	7	8	8	6	8	7	0	7	6	8	0	7	4	7	0
16	8	4	7	8	8	8	6	8	7	0	7	6	8	0	7	5	7	1
17	8	4½	7	9	8	8	6	7½	7	1	7	6	8	0	7	6	7	0
18	8	4½	7	10	8	9	6	8	7	3	7	6	8	0	7	7	7	1
19	8	5	7	10	8	9	6	8	7	2	7	7	8	1	7	7	7	1
20	8	5	7	10	8	9	6	8½	7	2	7	7	8	1	7	6	7	0
21	8	5	7	9	8	10	6	8	7	1	7	7	8	1	7	5	6	11
22	8	5	7	8	8	10	6	7	7	0	7	7	8	1	7	5	6	11
23	8	4½	7	9	8	10	6	7	6	10	7	8	8	2	7	3	6	9
24	8	4½	7	9	8	9	6	5½	6	9	7	8	8	2	7	0	6	6
25	8	4½	7	9	8	9	6	5	6	8	7	9	8	3	6	10	6	5
26	8	4	7	8	8	9	6	6	6	9	7	9	8	3	6	11	6	6
27	8	3½	7	8	8	9	6	6	6	8	7	9	8	3	6	10	6	5
28	8	3½	7	8	8	9	6	5½	6	7	7	10	8	4	6	10	6	5
29	8	4	7	8	8	10	6	6½	6	8	7	10	8	4	6	11	6	6
30	8	3½	7	8	8	10	6	5	6	9	7	10	8	4	6	11	6	6
31	8	3½	7	10	8	10	6	6	6	10	7	9	8	3	7	1	6	8

1838.	Athlone.				Lanesborough.				Cloondrah.				Rooskey.				Jamestown.				Battle Bridge.		Drumleague.	
	Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Low. Sill.		Up. Sill.		Lower Sill.		Upper Sill.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July 1	5	10	6	0	5	3	5	8	5	2	6	5	4	11	4	8	4	3	4	0	3	11½	5	6
2	5	10	6	0	5	3	5	8	5	2	6	5	4	11	4	7	4	3	4	0	3	11	5	6
3	6	0	6	0	5	3	5	8	5	2	6	5	4	10	4	7	4	3	4	0	3	11	5	6
4	6	0	6	0	5	4	4	8	5	1	6	4	4	10	4	6	4	2	3	11	3	10½	5	5
5	5	10	6	0	5	4	5	7	5	1	6	4	4	10	4	6	4	2	3	11	3	10	5	4
6	5	10	5	9	5	3	5	7	5	1	6	4	4	9	4	7	4	2	3	10	3	10	5	3
7	5	10	5	9	5	3	5	8	5	1	6	4	4	9	4	7	4	2	3	11	3	9½	5	3
8	5	10	5	9	5	3	5	8	5	1	6	4	4	9	4	7	4	2	3	11	3	8	5	4
9	5	10	5	9	5	3	5	8	5	1	6	4	4	9	4	7	4	2	3	11	3	8	5	5
10	5	10	5	9	5	3	5	8	5	1	6	4	4	9	4	7	4	2	3	11	3	8	5	5
11	5	11	5	9	5	4	5	9	5	1	6	4	4	10	4	7	4	2	3	11	3	9	5	6
12	6	1	5	9	5	5	5	10	5	2	6	5	4	10	4	7	4	2	3	11	3	11½	5	8
13	6	1	5	9	5	5	5	10	5	2	6	5	4	11	4	7	4	2	4	0	4	0	5	8
14	6	3	5	9	5	5	5	11	5	4	6	6	5	0	4	7	4	2	4	1	4	3	5	10
15	6	4	5	10	5	5	5	11	5	5	6	7	5	1	4	8	4	2	4	2	4	5	5	11
16	6	7	5	10	5	5	5	11	5	7	6	8	5	2	4	9	4	3	4	4	4	4½	6	0
17	6	7	5	11	5	6	6	0	5	9	6	9	5	3	4	8	4	3	4	6	4	5½	6	1
18	6	8	6	0	5	6	6	0	5	9	6	9	5	3	4	10	4	4	4	8	4	8½	6	3
19	6	9	6	0	5	7	6	1	5	10	6	10	5	5	4	10	4	4	4	8	4	9½	6	3
20	6	9	6	0	5	8	6	3	5	10	6	10	5	5	4	11	4	4	4	8	4	8	6	5
21	6	7	6	0	5	8	6	4	5	9	6	9	5	5	5	0	4	4	4	9	4	8	6	4
22	6	4	6	0	5	7	6	5	5	9	6	9	5	5	4	11	4	4	4	9	4	8	6	3
23	6	1	6	0	5	7	6	5	5	9	6	9	5	5	5	0	4	5	4	9	4	7	6	3
24	6	1	6	0	5	6	6	5	5	9	6	9	5	5	5	1	4	5	4	9	4	6½	6	2
25	6	0	6	0	5	5	6	4	5	8	6	9	5	5	5	1	4	5	4	9	4	6½	6	2
26	6	0	6	0	5	5	6	3	5	8	6	9	5	6	5	2	4	5	4	9	4	5½	6	3
27	6	0	6	0	5	4	6	3	5	9	6	10	5	6	5	1	4	5	4	8	4	6½	6	1
28	6	0	6	0	5	4	6	3	5	9	6	10	5	6	5	1	4	5	4	8	4	7	6	1
29	6	0	6	0	5	4	6	4	5	9	6	10	5	6	5	1	4	5	4	9	4	7½	6	2
30	6	0	6	0	5	4	6	4	5	9	6	10	5	6	5	1	4	6	4	10	4	8	6	2
31	6	1	6	0	5	4	6	4	5	9	6	10	5	7	5	1	4	6	4	10	4	7½	6	1

Appendix A.
No. 3.

Heights of Water on Lock Sills, August, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina. Up. Sill. Ft.	Errina. Up. Sill. In.	Cussaan. Low. Sill. Ft.	Cussaan. Low. Sill. In.	Killaloe. Up. Sill. Ft.	Killaloe. Up. Sill. In.	Hamilton. Low. Sill. Ft.	Hamilton. Low. Sill. In.	Hamilton. Up. Sill. Ft.	Hamilton. Up. Sill. In.	Banagher. Low. Sill. Ft.	Banagher. Low. Sill. In.	Banagher. Up. Sill. Ft.	Banagher. Up. Sill. In.
Aug. 1	8	3	7	11	8	10	6	5	6	10	7	9	8	3
2	8	4	8	0	8	10	6	5	6	11	7	8	8	2
3	8	5	8	2	8	11	6	8	7	0	7	8	8	2
4	8	5½	8	3	8	11	6	9	7	1	7	9	8	3
5	8	6	8	4	9	0	6	9½	7	1	7	9	8	3
6	8	8	8	6	9	0	6	10	7	2	7	9	8	3
7	8	9	8	8	9	2	6	10½	7	2	7	9	8	3
8	8	9	8	9	9	2	6	10	7	3	7	10	8	4
9	9	0	8	11	9	3	7	2¼	7	5	7	10	8	4
10	9	3	9	0	9	5	7	4½	7	8	7	11	8	5
11	10	6	9	2	9	8	7	8	7	10	8	3	8	9
12	10	6	9	3	9	10	7	9½	7	11	9	0½	9	2½
13	10	7	9	3	10	0	7	11	8	1	9	3	9	6
14	10	7	9	4	10	1	8	0	8	1	9	3	9	6½
15	10	7½	9	5	10	3	8	0	8	0½	9	2½	9	5¼
16	10	7½	9	5	10	3	8	0½	8	0½	9	1½	9	4½
17	10	6½	9	5	10	3	8	0	7	11	9	1½	9	4½
18	10	6	9	5	10	3	8	0	7	10	9	0	9	3
19	10	6	9	5	10	4	-	-	7	8½	9	0	9	3
20	10	5½	9	5	10	4	-	-	7	9	8	11	9	1
21	10	6	9	8	10	4	-	-	7	9	8	9	9	0
22	10	10	9	8	10	4	-	-	7	9½	8	9	9	0
23	10	9½	9	8	10	6	8	1½	7	10½	8	9	9	0
24	10	8½	9	9	10	6	8	1½	7	11½	9	0	9	3
25	10	10	9	9	10	5	8	2	7	11½	9	1½	9	4½
26	10	9½	9	9	10	4	8	2	7	11	9	1½	9	4½
27	10	9½	9	8	10	4	8	2½	7	11½	9	0	9	3
28	10	9½	9	7	10	3	8	2½	7	11½	9	0	9	3
29	10	9	9	6	10	3	8	0½	7	10½	9	0	9	3
30	10	9	9	5	10	3	8	1	7	10½	8	11	9	2
31	10	8½	9	5	10	3	8	1	7	10	8	11	9	2

1838.	Shannon Bridge. Low. Sill. Ft.	Shannon Bridge. Low. Sill. In.	Shannon Bridge. Up. Sill. Ft.	Shannon Bridge. Up. Sill. In.	Athlone. Low. Sill. Ft.	Athlone. Low. Sill. In.	Athlone. Up. Sill. Ft.	Athlone. Up. Sill. In.	Lanesborough. Low. Sill. Ft.	Lanesborough. Low. Sill. In.	Lanesborough. Up. Sill. Ft.	Lanesborough. Up. Sill. In.	Cloondrah. Low. Sill. Ft.	Cloondrah. Low. Sill. In.	Cloondrah. Up. Sill. Ft.	Cloondrah. Up. Sill. In.
Aug. 1	7	2	6	8	6	2	6	0	5	5	6	4	5	9	6	10
2	7	3	6	9	6	4	6	0	5	5	6	5	6	0	6	11
3	7	3	6	10	6	6	6	0	5	5	6	6	6	4	7	2
4	7	5	7	1	6	7	6	0	5	5	6	7	6	4	7	2
5	7	6	7	1	6	9	6	0	5	6	6	8	6	5	7	3
6	7	7	7	1	6	10	6	3	5	6	6	9	6	7	7	5
7	7	8	7	2	6	10	6	5	5	7	6	10	6	8	7	5
8	7	8	7	2	6	10	6	5	5	8	7	0	6	9	7	5
9	7	10	7	4	7	1	6	5	5	8	7	1	6	9	7	5
10	8	2	7	7	7	2	6	6	5	9	7	3	6	10	7	5
11	8	9	8	1	8	9	6	7	5	10	7	5	7	2	7	9
12	8	11	8	3	8	1	6	9	5	11	7	7	7	3	7	10
13	9	1	8	4	8	1	6	9	5	11	7	8	7	3	7	10
14	9	1	8	4	8	1	6	9	5	11	7	8	7	2	7	9
15	8	11	8	2	8	0	6	9	6	1	7	7	7	1	7	8
16	8	10	8	2	7	11	6	9	6	2	7	6	7	1	7	8
17	8	8	8	1	7	10	6	10	6	3	7	5	7	1	7	9
18	8	8	8	1	7	9	6	11½	6	4	7	5	7	1	7	9
19	8	7	8	0	7	9	6	11	6	4	7	5	7	1	7	9
20	8	4	7	11	7	9	6	11½	6	6	7	6	7	1	7	8
21	8	5	8	0	7	9	6	11½	6	5	7	6	7	1	7	8
22	8	7	8	1	7	10	7	1	6	4	7	8	7	3	7	9
23	8	9	8	7	7	11	7	3	6	4	7	8	7	3	7	9
24	8	11	8	10	8	0	7	3	6	5	7	9	7	3	7	9
25	8	9	8	10	8	1	7	3	6	6	7	9	7	4	7	10
26	8	9	8	10	8	2	7	3	6	7	7	10	7	4	7	10
27	8	11	8	5	8	1½	7	3	6	7	7	10	7	4	7	10
28	8	10	8	4	8	1	7	4	6	7	7	10	7	4	7	10
29	8	10	8	4	8	1	7	4	6	6	7	9	7	4	7	10
30	8	9	8	3	8	0½	7	4	6	7	7	8	7	4	7	10
31	8	8	8	3	8	0	7	4	6	8	7	8	7	4	7	10

1838.	Rooskey. Low. Sill. Ft.	Rooskey. Low. Sill. In.	Rooskey. Up. Sill. Ft.	Rooskey. Up. Sill. In.	Jamestown. Low. Sill. Ft.	Jamestown. Low. Sill. In.	Jamestown. Up. Sill. Ft.	Jamestown. Up. Sill. In.	Battle Bridge. Lower Sill. Ft.	Battle Bridge. Lower Sill. In.	Drumleague. Upper Sill. Ft.	Drumleague. Upper Sill. In.
Aug. 1	5	8	5	2	4	5	4	11	4	7½	6	1
2	5	9	5	2	4	5	4	11	5	5½	6	3
3	5	11	5	3	4	8	5	1	5	4	6	4
4	6	1	5	4	4	11	5	5	5	6	6	3
5	6	2	5	5	5	0	5	7	5	4½	6	5
6	6	2	5	7	5	0	5	8	5	9	6	7
7	6	4	5	8	5	1	5	9	5	9½	6	9
8	6	5	5	9	5	2	5	11	5	10	6	9
9	6	7	5	11	5	4	5	11	5	10½	6	7
10	6	7	5	11	5	6	6	0	6	0	6	9
11	6	10	6	1	5	9	6	1	6	1	6	10
12	7	0	6	2	5	10	6	2	6	2	6	11
13	7	0	6	3	5	11	6	2	6	1	6	10
14	7	0	6	4	5	11	6	1	6	0	6	9
15	6	10	6	4	5	11	6	0	5	11	6	8
16	6	11	6	5	5	11	6	0	5	10	6	7
17	6	11	6	5	6	0	6	0	5	9½	6	7
18	6	11	6	4	6	0	6	0	5	9	6	7
19	6	11	6	4	6	0	6	1	5	9½	6	6
20	6	11	6	4	6	0	6	2	5	9½	6	6
21	7	0	6	6	6	1	6	2	5	10½	6	7
22	7	0	6	7	6	1	6	4	6	7	7	4
23	7	1	6	8	6	2	6	8	6	7½	7	6
24	7	2	6	9	6	4	6	8	6	8	7	4
25	7	3	6	10	7	1	6	8	6	8½	7	3
26	7	3	6	10	6	7	6	8	6	8½	7	2
27	7	3	6	11	6	8	6	8	6	7½	7	2
28	7	3	6	11	6	7	6	6	6	6½	7	1
29	7	2	6	11	6	6	6	6	6	4½	7	1
30	7	2	6	10	6	6	6	5	6	4	6	11
31	7	1	6	10	6	6	6	4	6	3½	6	9

Appendix A.
No. 3.

Heights of Water on Lock Sills, September, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina.	Cussaan.	Killaloe.	Hamilton.		Banagher.		Shannon Bridge.		Athlone.		Lanesborough.		Cloondrah.		Rooskey.		Jamestown.		Battle Bridge.	Drumleague.
	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Low. Sill.	Up. Sill.	Lower Sill.	Upper Sill.
	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.
Sept. 1	10 8	9 4	10 2	8 0	7 9½	8 10	9 1	8 7	8 2	7 11½	7 4	6 8	7 7	7 3	7 9	7 0	6 9	6 4	6 3	6 2	6 9
2	10 7	9 6	10 2	7 11½	7 8½	8 10	9 1	8 7	8 1	7 11	7 4	6 8	7 7	7 3	7 9	7 0	6 9	6 3	6 2	6 0	6 8
3	10 6	9 4	10 2	7 11	7 8	8 9	9 0	8 6	8 0	7 11	7 4	6 7	7 7	7 3	7 9	6 11	6 8	6 3	6 1	5 11	6 8
4	10 6	9 4	10 1	7 10	7 7½	8 9	9 0	8 5	8 0	7 10	7 3½	6 7	7 6	7 3	7 8	6 11	6 7	6 2	6 0	5 11	6 8
5	10 6	9 4	10 1	7 8	7 8	8 8	8 11	8 5	8 0	7 9	7 3½	6 7	7 6	7 3	7 8	6 10	6 7	6 1	6 1	5 11	6 9
6	10 6½	9 3	10 1	7 8	7 8	8 9	9 0	8 7	8 1	7 9	7 3½	6 6	7 6	7 3	7 8	6 10	6 6	6 1	6 2	6 0	6 9
7	10 6½	9 3	10 1	7 7	7 8	8 11	9 2	8 6	8 1	7 9	7 3	6 5	7 5	7 2	7 9	6 9	6 7	6 0	6 2	6 2	6 10
8	10 6	9 3	10 0	7 9	7 8½	8 11	9 2	8 6	8 0	7 9	7 3½	6 6	7 5	7 2	7 9	6 9	6 7	6 1	6 3	6 2	6 11
9	10 5	9 3	10 0	7 8½	7 7½	8 10	9 1	8 5	8 0	7 9	7 4	6 6	7 5	7 1	7 8	6 10	6 7	6 2	6 3	6 1	6 10
10	10 5	9 1	10 0	7 8	7 7½	8 9	9 0	8 4	8 0	7 9	7 4	6 7	7 5	7 1	7 8	6 10	6 7	6 2	6 1	6 1	6 9
11	10 4	9 0	10 0	7 8	7 7	8 9	9 0	8 3	7 11	7 9	7 2½	6 7	7 5	7 1	7 8	6 10	6 6	6 2	6 1	6 0	6 8
12	10 4	8 11	10 0	7 7	7 6	8 8	8 11	8 3	7 11	7 8½	7 2½	6 7	7 5	7 0	7 7	6 10	6 6	6 2	6 0	5 11	6 6
13	10 4	8 11	9 11	7 8	7 6	8 7	8 10	8 2	7 11	7 10	7 2½	6 6	7 6	7 0	7 7	6 10	6 6	6 1	6 0	5 11½	6 7
14	10 3	8 11	9 10	7 7½	7 6	8 6	8 9	8 2	7 10	7 8	7 2½	5 6	7 6	7 0	7 7	6 10	6 6	6 1	6 0	5 11	6 7
15	10 1	8 10	9 10	7 6½	7 5½	8 6	8 9	8 2	7 10	7 7½	7 2½	6 6	7 5	7 0	7 7	6 9	6 6	6 0	5 11	5 10	6 6
16	10 0	8 10	9 9	7 5	7 5	8 6	8 9	8 2	7 10	7 6	7 2½	6 5	7 4	6 11	7 7	6 8	6 5	5 11	5 9	5 8½	6 6
17	9 11	8 9	9 9	7 5	7 5	8 5	8 8	8 1	7 9	7 6	7 2½	6 5	7 4	6 11	7 7	6 7	6 5	5 11	5 8	5 8	6 5
18	9 10½	8 8	9 8	7 4	7 3½	8 5	8 8	8 1	7 9	7 5	7 1½	6 5	7 3	6 10	7 6	6 7	6 4	5 11	5 7	5 6½	6 5
19	9 10	8 7	9 8	7 4	7 3½	8 4	8 7	8 0	7 8	7 5	7 1	6 5	7 2	6 10	7 6	6 6	6 3	5 10	5 6	5 6	6 4
20	9 9	8 6	9 7	7 3½	7 4	8 4	8 7	8 0	7 8	7 5	7 1	6 4	7 2	6 9	7 5	6 6	6 2	5 9	5 7	5 5	6 4
21	9 7½	8 5	9 7	7 3½	7 4	8 4	8 7	8 1	7 9	7 4¾	7 1	6 4	7 1	6 9	7 5	6 6	6 1	5 9	5 6	5 5	6 4
22	9 7	8 5	9 6	7 4	7 3	8 4	8 7	7 10	7 6	7 4½	7 0½	6 4	7 1	6 9	7 5	6 5	6 0	5 8	5 6	5 4	6 3
23	9 6	8 5	9 6	7 3½	7 3	8 3	8 6	7 10	7 6	7 4½	6 11½	6 3	7 0	6 8	7 4	6 4	6 1	5 8	5 5	5 4	6 4
24	9 5½	8 4	9 6	7 2½	7 3	8 3	8 6	7 10	7 6	7 3	6 11	6 4	7 1	6 8	7 4	6 4	6 0	5 8	5 5	5 3½	6 4
25	9 5	8 4	9 5	7 2½	7 3	8 3	8 6	7 10	7 6	7 3	7 0	6 3	7 1	6 7	7 4	6 3	6 0	5 7	5 4	5 3	6 5
26	9 4	8 4	9 5	7 1	7 2½	8 3	8 6	7 10	7 6	7 2½	6 11	6 2	7 1	6 7	7 4	6 2	5 11	5 6	5 4½	5 2	6 4
27	9 4	8 3	9 4	7 2	7 2½	8 3	8 6	7 9	7 5	7 2½	6 11	6 3	7 0	6 7	7 4	6 2	5 10	5 5	5 3	5 1	6 3
28	9 2	8 3	9 4	7 1½	7 2	8 3	8 6	7 8	7 5	7 2½	6 10	6 2	6 11	6 7	7 4	6 2	5 11	5 5	5 3	5 1	6 2
29	9 2	8 2	9 3	7 0½	7 1½	9 3	8 6	7 7	7 4	7 2	6 10	6 2	6 11	6 6	7 3	6 1	5 9	5 5	5 2	5 0½	6 2
30	9 0	8 2	9 3	7 0	7 1	8 3	8 6	7 6	7 3	6 10	6 10	6 1	6 10	6 6	7 3	6 1	5 9	5 4	5 1	5 0	6 1

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Appendix A.
No. 3.

Heights of Water on
Lock Sills.
October, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina. Up. Sill. Ft.	In.	Cussaan. Low. Sill. Ft.	In.	Killaloe. Up. Sill. Ft.	In.	Hamilton. Low. Sill. Ft.	In.	Hamilton. Up. Sill. Ft.	In.	Banagher. Low. Sill. Ft.	In.	Banagher. Up. Sill. Ft.	In.	Shannon Bridge. Low. Sill. Ft.	In.	Shannon Bridge. Up. Sill. Ft.	In.	Athlone. Low. Sill. Ft.	In.
Oct. 1	9	0	8	1	9	3	6	11	7	0	8	3	8	6	7	6	7	3	6	10
2	9	0	8	1	9	3	6	10½	7	0	8	3	8	6	7	6	7	3	6	10
3	8	11½	8	1	9	2	6	8½	7	0	8	3	8	6	7	5	7	2	6	10
4	8	11½	8	0	9	2	6	9	6	11	8	3	8	6	7	5	7	2	6	10
5	8	11	8	0	9	2	6	9½	6	10½	8	3	8	6	7	4	6	11	6	9
6	8	11	8	0	9	2	6	8	6	10	8	3	8	6	7	2	6	11	6	9½
7	8	10	8	0	9	1½	6	8	6	9	8	3	8	6	7	1	6	10	6	7½
8	8	9	8	0	9	0	6	7	6	9	8	1	8	4	7	0	6	10	6	9
9	8	8½	8	0	9	0	6	7	6	9	8	0	8	3	7	0	6	10	6	8
10	8	7½	8	0	8	11	6	7	6	8	8	0	8	3	6	11	6	9	6	8
11	8	7	8	0	8	10	6	7½	6	8	7	11	8	2	6	10	6	8	6	6
12	8	6½	8	0	8	9	6	5½	6	8	7	10	8	1	6	10	6	8	6	6
13	8	6	8	0	8	9	6	5½	6	8	7	9	8	0	6	10	6	9	6	6
14	8	4½	8	0	8	9	-	-	6	7	7	9	8	0	6	10	6	9	6	5½
15	8	4	8	0	8	11	6	6	6	6	7	8	7	11	6	11	6	10	6	4
16	8	8	8	0	9	0	-	-	6	6½	7	7	7	10	6	11	6	11	6	5
17	8	7	8	0	9	2	6	9	6	10	7	7	7	10	6	9	6	11	6	6
18	8	8	8	1	9	2	6	9	6	10½	7	7	7	10	6	9	6	11	6	7
19	9	0	8	2	9	3	6	11½	7	1	7	9	8	0	6	11	7	0	6	9
20	9	0	8	3	9	3	7	1½	7	2	7	11	8	2	7	6	7	1	6	9
21	8	0¾	8	4	9	4	7	2	7	2	8	1	8	4	7	6	7	1	6	8½
22	8	11½	8	5	9	5	7	2	7	1	8	2	8	5	7	5	7	0	6	8½
23	9	0	8	6	9	5	7	2	7	0½	8	2	8	5	7	5	7	0	6	9
24	9	2½	8	7	9	6	7	2½	7	2	8	2	8	5	7	6	7	2	6	10
25	9	3	8	8	9	7	-	-	7	2½	8	3	8	6	7	8	7	3	7	0
26	9	4	8	9	9	7	7	5	7	3	8	3	8	6	7	9	7	4	7	1
27	9	5½	8	10	9	8	-	-	7	3½	8	6	8	9	7	11	7	5	7	1
28	9	6	8	11	9	10		6	7	4	8	7	8	10	8	0	7	7	7	3
29	9	7	9	0	10	0	7	8	7	6½	8	9	9	0	8	2	7	9	7	6
30	9	9½	9	1	10	2	7	11½	7	9	8	10	9	1	8	5	7	11	7	6
31	9	10	9	2	10	3	8	1	7	10½	-	-	-	-	8	5	7	11	7	8

1838.	Athlone. Up. Sill. Ft.	In.	Lanesborough. Low. Sill. Ft.	In.	Lanesborough. Up. Sill. Ft.	In.	Cloondrah. Low. Sill. Ft.	In.	Cloondrah. Up. Sill. Ft.	In.	Rooskey. Low. Sill. Ft.	In.	Rooskey. Up. Sill. Ft.	In.	Jamestown. Low. Sill. Ft.	In.	Jamestown. Up. Sill. Ft.	In.	Battle Bridge. Lower Sill. Ft.	In.	Drumleague. Upper Sill. Ft.	In.
Oct. 1	6	10	6	1	6	10	6	6	7	3	6	0	5	8	5	3	5	0	4	11	6	2
2	6	10	6	1	6	9	6	5	7	3	6	0	5	8	5	2	4	11	4	10½	6	2
3	6	9	6	1	6	8	6	4	7	3	5	11	5	7	5	2	4	11	4	9½	6	1
4	6	9	6	0	6	8	6	3	7	3	5	10	5	6	5	1	4	10	4	8½	6	0
5	6	9	5	11	6	7	6	2	7	2	5	10	5	5	5	0	4	10	4	8	5	11
6	6	9	5	11	6	7	6	1	7	1	5	9	5	5	5	0	4	10	4	7½	5	10
7	6	7	5	11	6	7	-	-	7	0	5	9	5	4	4	11	4	9	4	7	5	10
8	6	8	5	10	6	6	5	11	6	11	5	8	5	4	4	11	4	8	4	6	5	10
9	6	6	5	10	6	6	5	11	6	11	5	7	5	3	4	11	4	8	4	5½	5	9
10	6	6	5	9	6	5	5	11	6	11	5	6	5	3	4	10	4	7	4	5	5	9
11	6	6	5	10	6	5	5	11	6	11	5	6	5	2	4	8	4	6	4	5	5	8
12	6	6	5	9	6	4	5	10	6	10	5	6	5	1	4	7	4	6	4	4½	5	9
13	6	6	5	9	6	4	5	10	6	10	5	0	5	1	4	6	4	6	4	4	5	9
14	6	5	5	8	6	3	5	10	6	10	5	4	5	1	4	6	4	6	4	4	5	8
15	6	4	5	9	6	3	5	10	6	10	5	5	5	1	4	6	4	7	4	8	5	10
16	6	4	5	10	6	4	5	11	6	10	5	5	5	2	4	7	4	10	5	0	6	3
17	6	6	5	10	6	5	5	11	6	10	5	5	5	2	4	8	5	0	5	1	6	8
18	6	4	5	10	6	5	6	1	6	11	5	6	5	3	4	9	5	3	5	2½	6	8
19	6	4	5	9	6	5	6	1	6	11	5	7	5	3	4	11	5	6	5	6	6	11
20	6	4	5	9	6	6	6	2	7	0	5	8	5	5	5	0	5	7	5	7	6	10
21	6	4	5	9	6	7	6	3	7	1	5	10	5	5	5	1	5	8	5	8	6	9
22	6	4	5	10	6	7	6	3	7	1	5	11	5	6	5	3	5	7	5	9	6	8
23	6	4	5	11	6	8	6	3	7	2	6	0	5	7	5	5	5	7	5	9	6	9
24	6	4	5	11	6	10	6	5	7	5	6	1	5	10	5	6	5	8	5	11	7	0
25	6	3	5	11	7	0	6	6	7	6	6	3	5	11	5	7	5	10	6	0	7	1
26	6	5	5	11	7	2	6	8	7	8	6	4	6	1	5	7	6	2	6	4	7	5
27	6	6	6	0	7	3	6	9	7	9	6	6	6	2	5	10	6	5	6	6	7	6
28	6	6	6	0	7	4	6	9	7	9	6	8	6	6	6	0	6	8	6	8	7	6
29	6	6	6	1	7	4	6	11	7	11	6	9	6	6	6	2	6	10	6	10½	7	7
30	6	6	6	2	7	5	7	2	8	0	6	11	6	7	6	2	6	11	6	11	7	7
31	6	7	6	2	7	6	7	3	8	0	7	0	6	9	6	2	6	11	7	0	7	7

Appendix A.
No. 3.

Heights of Water on Lock Sills, November, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina. Up. Sill. Ft.	In.	Cussaan. Low. Sill. Ft.	In.	Killaloe. Up. Sill. Ft.	In.	Hamilton. Low. Sill. Ft.	In.	Hamilton. Up. Sill. Ft.	In.	Banagher. Low. Sill. Ft.	In.	Banagher. Up. Sill. Ft.	In.
Nov. 1	9	11	9	3	10	4	8	2	7	10½	8	11	9	2
2	10	1	9	5	10	6	8	3	7	10	9	0	9	3
3	10	3	9	7	10	9	8	10	7	10	9	1	9	4
4	10	6	9	8	10	10	8	6	8	2	9	2	9	5
5	10	7	9	9	11	0	8	9	8	4½	9	3	9	6
6	10	8½	9	10	11	2	8	9	8	5½	9	4	9	7
7	11	1½	9	11	11	4	9	1½	8	9	9	5	9	8
8	11	3	10	0	11	8	9	9	9	2	9	7	9	10
9	11	6	10	1	11	11	9	11	9	2½	9	9	10	0
10	11	10	10	2	12	3	10	1	9	2½	9	11	10	2
11	11	11	10	3	12	5	10	0	9	2	10	1	10	4
12	11	10	10	4	12	5	10	1	9	2	10	2	10	5
13	11	10	10	5	12	4	10	1	9	0	10	3	10	6
14	11	9½	10	6	12	3	10	0	8	11	10	6	10	9
15	11	9	10	8	12	3	9	11	8	10	10	7	10	0
16	11	8	10	9	12	2	9	10	8	8	10	7	10	10
17	11	7	10	11	12	1	9	10	8	8	10	9	11	0
18	11	7	11	0	12	1	-	-	-	-	10	11	11	2
19	11	7	11	2	12	0	9	6	8	6	10	11	11	2
20	11	6½	11	3	11	11	9	5½	8	6	11	0	11	3
21	11	6	11	4	11	10	9	4½	8	6	11	0	11	3
22	11	6	11	4	11	11	9	5	8	6½	11	0	11	3
23	11	5	11	4	12	0	9	6	8	6	10	10	11	1
24	11	3½	11	3	12	0	-	-	8	6	10	9	11	0
25	11	3	11	2	12	0	-	-	-	-	10	7	10	10
26	11	3	11	1	12	1	9	4	8	5	10	6	10	9
27	11	3	11	4	12	4	9	4½	8	6½	10	5	10	8
28	11	3	11	5	12	6	9	3	8	4	10	4	10	7
29	11	6	11	10	12	9	-	-	8	6	10	3	10	6
30	11	10½	12	0	12	9	-	-	9	0½	10	3	10	6

1838.	Shannon Bridge. Low. Sill. Ft.	In.	Shannon Bridge. Up. Sill. Ft.	In.	Athlone. Low. Sill. Ft.	In.	Athlone. Up. Sill. Ft.	In.	Lanesborough. Low. Sill. Ft.	In.	Lanesborough. Up. Sill. Ft.	In.	Cloondrah. Low. Sill. Ft.	In.	Cloondrah. Up. Sill. Ft.	In.
Nov. 1	8	6	8	1	7	9	6	10	6	4	7	9	7	4	8	1
2	8	8	8	2	7	11	7	0	6	5	7	10	7	6	8	2
3	8	10	8	4	8	0	7	1	6	6	8	1	7	7	8	3
4	9	1	8	6	8	2	7	2	6	7	8	4	7	11	8	5
5	9	2	8	8	8	5	7	2	6	8	8	5	8	1	8	8
6	9	4	8	10	8	6	7	3	6	10	8	6	8	2	8	8
7	9	7	9	2	9	1	7	8½	7	1	8	10	8	10	9	0
8	9	10	9	5	9	8	7	10	7	4	9	4	9	6	9	8
9	10	4	9	10	9	10	8	2	7	8	9	7	9	6	9	8
10	10	7	10	1	9	11	8	6	7	10	9	8	9	6	9	8
11	10	5	10	0	9	8	8	7	7	10	9	8	9	6	9	8
12	10	2	9	10	9	8	8	9	8	2	9	5	9	4	9	6
13	10	0	9	9	9	9	8	9	8	3	9	4	9	2	9	4
14	9	11	9	9	9	8	8	11	8	3	9	3	9	1	9	3
15	9	10	9	8	9	8	8	10	8	2	9	2	9	0	9	2
16	9	9	9	7	9	8	8	10	8	2	9	1	8	11	9	1
17	9	9	9	7	9	7	8	10	8	1	9	0	8	10	9	0
18	9	9	9	7	9	5	8	10	8	2	8	11	8	6	8	9
19	9	7	9	5	9	5	8	10	8	1	8	9	8	5	8	8
20	9	8	9	5	9	5	8	10	8	2	8	8	8	5	8	7
21	9	8	9	5	9	5	8	10	8	2	8	8	8	4	8	6
22	9	7	9	6	9	5	8	10	8	2	8	7	8	3	8	5
23	9	7	9	5	9	5	8	10	8	1	8	7	8	2	8	4
24	9	5	9	4	9	4	8	10	8	0	8	6	8	1	8	3
25	9	5	9	3	9	3	8	10	8	0	8	5	8	0	8	2
26	9	4	9	2	9	3	8	7	8	0	8	4	7	0	8	1
27	9	5	9	3	9	3	8	6	7	11	8	4	7	0	8	0
28	9	6	9	4	9	2	8	5	7	10	8	3	7	0	7	10
29	9	7	9	5	9	11½	8	7	8	3	8	9	7	0	7	10
30	9	8	9	6	10	0	8	7	8	1	9	0	6	11	7	9

1838.	Rooskey. Low. Sill. Ft.	In.	Rooskey. Up. Sill. Ft.	In.	Jamestown. Low. Sill. Ft.	In.	Jamestown. Up. Sill. Ft.	In.	Battle Bridge. Lower Sill. Ft.	In.	Drumleague. Upper Sill. Ft.	In.
Nov. 1	7	0	6	10	6	4	7	0	7	0	7	8
2	7	1	7	1	6	6	7	2	7	6	7	11
3	7	4	7	0	6	8	7	7	7	10	8	0
4	7	7	7	4	7	0	7	10	8	0	8	2
5	7	10	7	6	7	1	7	11	8	2	8	5
6	8	6	7	8	7	3	8	1	8	4	8	5
7	8	10	7	10	7	6	8	6	8	10½	8	10
8	9	0	8	1	7	10	8	9	9	1½	9	0
9	9	1	8	3	7	11	8	10	9	1½	9	1
10	9	2	8	4	7	11	8	11	9	1½	8	10
11	9	0	8	3	7	11	8	10	8	11½	8	9
12	8	11	8	3	8	0	8	9	8	11½	8	8
13	8	11	8	3	7	11	8	8	8	10½	8	5
14	8	10	8	2	7	11	8	7	8	8¼	8	4
15	8	8	8	1	7	11	8	5	8	5½	8	2
16	8	7	8	0	7	9	8	3	8	3	8	0
17	8	5	8	0	7	8	8	2	8	2	7	10
18	8	2	7	10	7	8	7	11	8	1	7	8
19	8	0	7	9	7	7	7	10	7	10	7	7
20	7	10	7	8	7	6	7	9	7	7½	7	4
21	7	9	7	7	7	5	7	8	7	5½	7	3
22	7	8	7	6	7	4	7	7	7	4½	7	3
23	7	8	7	5	7	1	7	6	7	3	7	2
24	7	7	7	4	7	0	7	5	7	1	7	1
25	7	6	7	4	6	11	7	4	7	0	7	0
26	7	5	7	3	6	10	7	2	6	11	6	10
27	7	3	7	2	6	8	7	0	6	10½	7	1
28	7	3	7	1	6	7	6	10	7	6	7	4
29	7	8	7	4	6	10	7	2	7	7	7	7
30	8	1	7	6	7	0	7	6	7	10	8	1

Appendix A.
No. 3.

Heights of Water on Lock Sills, December, 1838.

TABLE of the HEIGHTS of WATER upon the LOCK SILLS from LIMERICK to LOUGH ALLEN—*Continued.*

1838.	Errina. Up. Sill. Ft.	In.	Cussaan. Low. Sill. Ft.	In.	Killaloe. Up. Sill. Ft.	In.	Hamilton. Low. Sill. Ft.	In.	Hamilton. Up. Sill. Ft.	In.	Banagher. Low. Sill. Ft.	In.
Dec. 1	12	0¼	12	6	12	10	10	8	9	4½	10	2
2	12	3½	12	8	12	10	10	9	9	7	10	1
3	12	8½	12	11	13	0	11	2½	9	7½	10	1
4	12	11	13	4	13	3	11	4	9	9	10	0
5	13	0	13	7	13	3	11	4	9	8	9	11
6	13	0	13	7	13	2	11	4	9	6	9	9
7	12	11½	13	7	13	1	11	2	9	2	9	9
8	12	11	13	7	13	0	11	0	9	3	9	9
9	12	9	13	5	13	0	10	10	9	2½	9	9
10	12	8½	13	2	12	10	10	10	9	1½	9	9
11	12	7	12	10	12	9	10	7	9	0	10	0
12	12	5	12	8	12	7	10	5	8	11	10	3
13	12	2½	12	6	12	6	10	5	8	10	10	5
14	12	2	12	4	12	5	10	3	8	10	10	9
15	11	11½	12	3	12	4	10	1½	8	9½	10	9
16	11	11	12	2	12	2	10	0	8	9	10	6
17	11	8	12	1	12	0	10	0	8	8½	10	3
18	11	6½	12	0	12	0	9	10	8	6½	10	0
19	11	4½	11	11	11	10	9	0	8	6	9	10
20	11	4½	11	10	11	10	9	7	8	6	9	10
21	11	4	11	10	11	10	9	6	8	6	9	9
22	11	3½	11	9	11	10	9	6	8	7	9	9
23	11	3½	11	8	11	10	-	-	9	7½	9	9
24	11	6	11	7	11	10	-	-	8	11	10	0
25	11	6	11	6	11	10	9	9	9	0½	10	3
26	11	6½	11	8	11	11	-	-	9	0	10	6
27	11	6½	11	10	11	11	10	0	9	2	11	0
28	11	7½	11	11	12	2	10	0½	9	2½	10	7
29	12	0	12	1	12	3	10	2½	9	2½	10	7
30	11	11	12	1	12	4	-	-	9	0	10	7
31	11	11	12	1	12	4	10	3	9	3	10	7

1838.	Banagher. Up. Sill. Ft.	In.	Shannon Bridge. Low. Sill. Ft.	In.	Shannon Bridge. Up. Sill. Ft.	In.	Athlone. Low. Sill. Ft.	In.	Athlone. Up. Sill. Ft.	In.	Lanesborough. Low. Sill. Ft.	In.
Dec. 1	10	5	9	11	9	8	10	3	8	9	8	2
2	10	4	10	0	9	10	10	3	8	10	8	5
3	10	4	10	2	10	0	10	6	9	0	8	8
4	10	3	10	9	10	4	10	5	9	3	8	8
5	10	2	10	9	10	4	10	5	9	3	8	9
6	10	0	10	8	10	4	10	3	9	3	8	10
7	10	0	10	6	10	3	10	3	9	3	8	10
8	10	0	10	5	10	1	10	1	9	3	8	10
9	10	0	10	4	10	0	9	11	9	3	8	10
10	10	0	10	0	9	11	9	11	9	2	8	11
11	10	3	10	0	9	11	9	11	9	1	8	10
12	10	6	9	11	9	10	9	10	9	2	8	9
13	10	8	9	11	9	10	9	10	9	3	8	9
14	11	0	9	10	9	9	9	10	9	4	8	9
15	11	0	9	9	9	8	9	9	9	3	8	8
16	10	9	9	8	9	7	9	9	9	3	8	8
17	10	6	9	7	9	6	9	9	9	3	8	7
18	10	3	9	6	9	5	9	6	9	3	8	6
19	10	1	9	6	9	5	9	6	9	3	8	5
20	10	1	9	5	9	4	9	6	9	3	8	4
21	10	0	9	5	9	4	9	3	8	9	8	3
22	10	0	9	6	9	5	9	3	8	9	8	4
23	10	0	9	8	9	6	9	3	8	9	8	5
24	10	3	9	9	9	7	9	3	8	9	8	4
25	10	6	9	9	9	7	9	3	8	9	8	5
26	10	9	9	10	9	8	9	6	9	0	8	6
27	11	3	10	0	9	9	10	0	9	3	8	7
28	10	10	10	3	10	0	10	0½	9	3	8	9
29	10	10	10	4	10	1	10	1	9	4	8	10
30	10	10	10	4	10	1	10	3	9	6	8	11
31	10	10	10	3	10	1	10	2	9	6	8	11

1838.	Lanesborough. Up. Sill. Ft.	In.	Cloondrah. Low. Sill. Ft.	In.	Cloondrah. Up. Sill. Ft.	In.	Rooskey. Low. Sill. Ft.	In.	Rooskey. Up. Sill. Ft.	In.	Jamestown. Low. Sill. Ft.	In.	Jamestown. Up. Sill. Ft.	In.	Battle Bridge. Lower Sill. Ft.	In.	Drumleague. Upper Sill. Ft.	In.
Dec. 1	9	1	7	2	7	11	8	4	7	7	7	4	7	11	8	0	8	3
2	9	6	7	7	8	6	8	6	7	9	7	6	8	1	8	5	8	5
3	9	8	8	4	9	0	8	7	7	10	7	7	8	3	8	7	8	6
4	9	8	8	7	9	3	8	9	8	0	7	8	8	4	8	7	8	7
5	9	8	8	8	9	4	8	8	8	0	7	9	8	6	8	7½	8	8
6	9	7	8	8	9	4	8	8	8	0	7	9	8	6	8	9	8	7
7	9	6	8	8	9	4	8	7	8	1	7	9	8	6	8	8	8	6
8	9	5	8	8	9	3	8	7	8	1	7	9	8	5	8	6	8	4
9	9	5	8	7	9	0	8	6	8	0	7	8	8	4	8	4½	8	2
10	9	4	8	7	9	0	8	5	7	11	7	7	8	3	8	3	8	0
11	9	4	8	7	9	0	8	4	7	10	7	6	8	2	8	1½	7	10
12	9	3	8	6	8	11	8	3	7	9	7	5	8	1	8	1	7	9
13	9	3	8	6	8	10	8	2	7	9	7	4	8	0	7	11	7	8
14	9	1	8	6	8	7	8	0	7	8	7	3	7	10	7	9½	7	6
15	8	11	8	5	8	6	7	11	7	8	7	2	7	8	7	7½	7	4
16	8	11	8	5	8	6	7	10	7	7	7	2	7	7	7	6	7	3
17	8	10	8	4	8	5	7	9	7	6	7	0	7	5	7	4	7	2
18	8	10	8	4	8	5	7	7	7	5	7	0	7	3	7	2	7	1
19	8	10	8	4	8	5	7	7	7	5	7	1	7	2	7	1	6	11
20	8	8	8	3	8	4	7	6	7	5	6	11	7	1	7	0	7	0
21	8	7	8	3	8	4	7	6	7	4	6	11	7	2	7	2	7	3
22	8	10	8	3	8	4	7	6	7	4	7	0	7	3	7	4	7	7
23	8	11	8	7	8	8	7	10	7	5	7	1	7	4	7	7½	7	9
24	9	0	8	10	9	0	8	1	7	7	7	2	7	6	8	0½	8	1
25	9	5	8	10	9	0	8	5	7	9	7	3	7	10	8	2	8	1
26	9	7	9	0	9	2	8	6	7	10	7	5	8	0	8	4	8	2
27	9	7	9	0	9	2	8	7	7	11	7	6	8	2	8	5	8	2
28	9	7	9	0	9	2	8	8	7	11	7	8	8	3	8	5½	8	3
29	9	7	9	0	9	2	8	9	8	0	7	9	8	4	8	5½	8	3
30	9	7	9	0	9	1	8	8	8	0	7	9	8	4	8	6	8	3
31	9	7	8	11	9	1	8	8	8	0	7	9	8	5	8	6	8	2

Appendix B.
Registry of Borings.

Curreen.
(See Pl. No. 16.)

Lanesboro'.
(See Pl. No. 17.)

APPENDIX B.

Registry of Details of Borings from Curreen to Tarmonbarry.

Note.—The Datum Level is 3 feet 4 inches under the Lower Sill of Cloondrah Lock.

Name of Place.	No. of Section.*	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Curreen. (See Pl. No. 16.)		1	2 0	–	6 7	Blue clay and gravel.	Stopped in clay and gravel.
		2	3 3	–	6 3	Blue clay and gravel.	Stopped in clay and gravel.
		3	1 6	–	6 10	Blue clay and gravel.	Stopped in clay and gravel.
		4	1 0	–	7 5	Blue clay and gravel.	Stopped in clay and gravel.
		5	1 8	–	6 10	Blue clay and gravel.	Stopped in clay and gravel.
		6	3 0	–	8 0	Blue clay and gravel.	Stopped in clay and gravel.
	Between Figures 3 & 4	7	4 6	–	6 3	Blue clay and gravel.	Stopped in clay and gravel.
		8	6 0	–	6 10	Blue clay and gravel.	Stopped in clay and gravel.
		9	5 6	–	7 5	Blue clay and gravel.	Stopped in clay and gravel.
		10	3 9	–	6 10	Blue clay and gravel.	Stopped in clay and gravel.
Lanesboro'. (See Pl. No. 17.)	1	1	3 2	–	2 6	Gravel.	
					7 10	Brown clay.	
					10 4		Stopped in brown clay.
	1	2	6 0	–	2 6	Gravel.	
					8 0	Brown clay and gravel.	
					0 9	Gravel.	
					11 3		Stopped in gravel.
	1	3	4 8	–	2 0	Gravel.	
					6 0	Clay.	
					2 0	Marl.	
					2 0	Gravel.	
					12 0		Stopped in gravel.
	1	4	4 10	–	2 0	Gravel.	
					4 10	Brown clay.	
					1 3	Gravel.	
					8 1		Stopped in gravel.
	1	5	6 0	–	2 6	Gravel.	
					1 8	Fine sand.	
					3 4	Blue clay.	
					7 6		Stopped by limestone rock.
	Between Figures 2 & 3	6	3 0		2 6	Gravel.	
					2 0	Brown clay and boulders.	
					3 0	Marl.	
					1 6	Gravel.	
					9 0		Stopped in gravel.
		7	5 10	–	2 0	Gravel.	
					7 6	Brown clay.	
					9 6		Stopped in brown clay.
		8	4 6	–	1 6	Gravel.	
					5 6	Brown clay.	
					0 6	Gravel.	
					7 6		Stopped in gravel.
		9	3 3	–	1 6	Gravel.	
					2 6	Brown clay and gravel.	
					0 6	Gravel.	
					4 6		Stopped in gravel.
		10	3 10	–	3 0	Gravel and stones.	Stopped by rock.
		11	3 0	–	2 6	Gravel.	
					3 6	Brown clay.	
					1 3	Gravel.	
					7 3		Stopped in gravel.

* The Numbers of the Sections given in this Registry of Borings are those which refer to the Original Sections—a selection from which only is furnished with the Report.

Appendix B.
Registry of Borings.
Lanesboro'.
(See Pl. No. 17.)

Registry of Details of Borings from Curreen to Tarmonbarry—*Continued.*

Note.—The Datum Level is 3 feet 4 inches under the Lower Sill of Cloondrah Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Lanesboro'—*Continued.*)	Between Figures 2 & 3	12	1 6	–	1 6	Gravel and boulders.	
					3 6	Brown clay and do.	
					0 10	Gravel.	
					5 10		Stopped in gravel.
		13	1 6	–	3 6	Sand, gravel, and boulders.	Stopped by stone.
		14	1 10	–	3 9	Sand, gravel, and boulders.	Stopped by stone.
		15	1 10	–	3 0	Sand, gravel, and boulders.	Stopped by stone.
	Figure 4	16	4 0	–	1 2	Gravel.	
					3 3	Brown clay.	
					1 6	Gravel.	
					5 11		Stopped in gravel.
		17	5 4	–	4 8	Limestone gravel.	
					2 11	Gravel and clay.	
					7 7		Stopped by stone.
		18	6 0	–	2 6	Gravel.	
					4 6	Brown clay.	
					1 4	Gravel.	
					8 4		Stopped in gravel.
		19	5 5	–	2 6	Gravel.	
					2 9	Brown clay.	
					0 2	Stone.	
					5 5		Stopped by stone.
		20	6 0	–	3 2	Gravel.	
					3 6	Brown clay.	
					1 4	Gravel.	
					8 0		Stopped in gravel.
	Between Figures 4 & 5	21	4 6	–	1 0	Mud.	
					1 6	Gravel.	
					3 0	Brown clay.	
					0 8	Gravel.	
					6 2		Stopped in gravel.
		22	5 4	–	1 6	Sand and gravel.	
					3 6	Brown clay.	
					5 0		Stopped in clay.
		23	3 11	–	2 6	Clay and gravel.	
					2 4	Brown clay.	
					4 10		Stopped by stone.
		24	3 11	–	1 6	Brown clay.	
					2 1	Clay and boulders.	
					0 4	Stone.	
					3 11		Stopped by stone.
		25	6 3	–	0 9	Gravel.	
					3 5	Brown clay.	
					0 4	Stone.	
					4 6		Stopped by stone.
		26	6 3	–	1 0	Gravel.	
					2 6	Brown clay.	
					3 6		Stopped by stone.
	Between Figures 6 & 7	27	4 6	–	5 4	Blue sandy clay.	Stopped in clay.
		28	4 6	–	4 3	Blue sandy clay.	Stopped in clay.
		29	10 2	–	2 0	Alluvial clay.	Bored on the island.
					6 0	Blue clay and gravel.	
					2 0	Fine gravel.	
					1 4	Brown clay.	
					11 4		

Appendix B.
Registry of Borings.

Lanesboro'. (See Pl. No. 17.)
Killnacarrow. (See Pl. No. 20.)
Crompawn. (See Pl. No. 21.)
Erra. (See Pl. No. 22.)
Cloonbearlaw. (See Pl. No. 23.)
Lodge. (See Pl. No. 24.)

REGISTRY of Details of BORINGS from CURREEN to TARMONBARRY—*Continued.*

NOTE.—The Datum Level is 3 feet 4 inches under the Lower Sill of CLOONDRAH LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
LANESBORO'. *Continued.*	Between Figures 6 & 7	30	5 10	–	7 0	Blue clay.	
					1 0	Fine sand.	
					1 1	Brown clay.	
					9 1		Stopped in clay.
		31	6 11	–	1 0	Gravel.	
					6 0	Blue clay.	
					1 6	Fine sand.	
					0 10	Gravel.	
					9 4		Stopped in gravel.
KILLNACARROW. (See Pl. No. 20.)	Near Figure 3	1	3 9	–	0 6	Gravel.	
					3 9	Brown clay.	
					4 3		Stopped in clay.
		2	2 9	–	1 0	Gravel.	
					3 3	Blue clay and boulders.	
					2 0	Gravel.	
					6 3		Stopped in gravel.
		3	4 4	–	1 0	Gravel.	
					1 6	Blue clay.	
					4 0	Brown clay.	
					6 6		Stopped in clay.
	Between Figures 4 & 5	4	4 8	–	1 0	Gravel.	
					4 6	Brown clay and boulders.	
					5 6		Stopped in clay.
CROMPAWN. (See Pl. No. 21.)	Figure 3	1	4 6	–	3 6	Blue clay.	
					2 3	Brown clay and boulders.	
					5 9		Stopped in clay.
ERRA. (See Pl. No. 22.)	Figure 4	1	4 0	–	1 0	Gravel.	
					5 4	Brown clay and stones.	
					6 4		Stopped in clay.
		2	4 0	–	1 8	Gravel.	
					3 4	Brown clay and boulders.	
					5 0		Stopped in clay.
CLOONBEARLAW (See Pl. No. 23.)	Figure 4	1	4 9	–	1 8	Gravel.	
					3 4	Brown clay and boulders.	
					5 0		Stopped in clay.
		2	4 0	–	3 2	Blue clay, gravel and stones	Stopped by stone.
		3	4 0	–	4 0	Blue clay, gravel and stones	Stopped by stone.
		4	5 6	–	1 0	Gravel.	
					5 4	Blue clay and stone.	
					6 4		Stopped in clay.
LODGE. (See Pl. No 24.)	Between Figures 3 & 4	1	3 0	–	1 0	Gravel.	
					2 6	Brown clay and stones.	
					3 6		Stopped by stone.
		2	4 0	–	1 2	Sand and gravel.	
					3 1	Brown clay and stones.	
					4 3		Stopped in clay.
		3	4 9	–	1 0	Gravel.	
					5 10	Blue clay and stones.	
					6 10		Stopped in clay.

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Registry of Details of Borings from Curreen to Tarmonbarry—*Continued.*

Note.—The Datum Level is 3 feet 4 inches under the Lower Sill of Cloondrah Lock.

Appendix B.
Registry of Borings.

Lodge.
(See Pl. No. 24.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Lodge—*Continued.*	Between Figures 4 & 5	4	6 0	–	1 0 4 6	Gravel. Blue clay and stones.	
					5 6		Stopped by stone.
		5	6 3	–	2 6 3 10	Brown clay. Blue clay.	
					6 4		Stopped by stone.
		6	11 0	–	4 8	Blue clay and stones.	Stopped by stone.
	In line with North-East end of Cut.	7	3 10	–	0 9 5 10	Gravel. Blue clay and stones.	
					6 7		Stopped in clay.
		8	5 3	–	6 8	Blue clay and stones.	Stopped in clay.
		9	4 0	–	3 0 2 6	Peat. Blue clay and stones.	
					5 6		Stopped in clay.

21*st February,* 1839.

Charles Tarrant, Civil Engineer.

Registry of Details of Borings from Tarmonbarry to Lough Nanogue.

Note.—The Datum Level is 25 feet below the present Lower Sill of Cloondrah Lock.

Tarmonbarry.
(See Pl. No. 25.)

Cloondrah.
(See Pl. No. 29.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Tarmonbarry, along the River Course. (See Pl. No. 25.)	Between 2 & 3	1	36 3	–	6 3	Soil and gravel.	Found rock.
	5 – 6	2	37 10	–	6 9	Soil and gravel.	Found rock.
		3	30 0	–	0 4	Sand.	Found rock.
	6 – 7	4	29 6	–	1 4	Sand.	Found rock.
	8 – 9	5	30 4	–	1 3	Sand.	Found rock.
	14 – 15	6	41 0	–	4 1	Gravel and sand.	On Island.
	15 – 16	7	31 0	–	1 0	Gravel and sand.	River bed.
		8	40 8	–	7 3	Gravel and sand.	On Island.
	16 – 17	9	40 10	–	6 3	Gravel and sand.	On Island.
	17 – 18	10	32 7	–	0 0	Naked rock.	River bed.
	25 – 26	11	32 6	–	1 3	Sand.	
	28 – 29	12	30 0	–	1 2	Sand.	
	31 – 32	13	35 7	–	1 3	Sand.	
Cloondrah, near the Cross Water, to Ballykenny. (See Pl. No. 29.)	–	1	38 6	–	24 9	Alluvial clay.	This clay appeared to continue still deeper.
	–	2	38 6	–	24 9	Alluvial clay.	
	–	3	38 10	–	24 9	Alluvial clay.	
	–	4	38 9	–	24 9	Alluvial clay.	

Appendix B.
Registry of Borings.

Cloondrah.
(See Pl. No. 30.)

REGISTRY of Details of BORINGS from TARMONBARRY to LOUGH NANOGUE—*Continued.*

NOTE.—The Datum Level is 25 feet below the present Lower Sill of CLOONDRAH LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
CLOONDRAH, (Along the Canal, and across the Island to Lough Forbes.)	Pl. 31	1	26 0	–	4 0	Mud.	
					4 4	Gravel.	
					8 4		Found rock.
	,,	2	25 6	–	4 0	Clay.	Found rock.
	,,	3	25 6	–	5 9	Clay.	Found rock.
	,,	4	31 0	–	5 8	Gravel and clay.	Found rock.
	,,	5	30 8	–	5 3	Gravel and clay.	Found rock.
	,,	6	30 0	–	5 2	Gravel and clay.	Found rock.
	,,	7	29 10	–	5 2	Gravel and clay.	Found rock.
	,,	8	31 4	–	4 11	Gravel and clay.	Found rock.
	,,	9	39 0	–	6 6	Alluvial soil.	
					3 6	Clay and gravel.	
					10 0		Stopped in clay and gravel.
	,,	10	39 0	–	6 3	Alluvial soil.	
					3 6	Clay and gravel.	
					9 9		Stopped in clay and gravel.
	,,	11	39 3	–	7 3	Alluvial soil.	
					2 9	Clay and gravel.	
					10 0		Stopped in clay and gravel.
	,,	12	41 9	–	8 3	Alluvial soil.	
					3 9	Clay and gravel.	
					12 0		Stopped in clay and gravel.
	,,	13	43 9	–	8 0	Alluvial soil.	
					5 9	Clay and gravel.	
					13 9		Stopped in clay and gravel.
	,,	14	45 6	–	8 3	Alluvial soil.	
					8 3	Clay and gravel.	
					16 6		Stopped in clay and gravel.
	,,	15	46 0	–	8 3	Bog.	
					8 3	Clay and gravel.	
					16 6		Stopped in clay and gravel.
	,,	16	46 6	–	7 6		
					10 6	Clay and gravel.	
					18 0		Stopped in clay and gravel.
	,,	17	47 9	–	5 6	Bog.	
					11 6	Clay and gravel.	
					16 6		Found rock.
	,,	18	55 0	–	18 3	Bog.	
					7 9	Clay and gravel.	
					26 0		Stopped in clay and gravel.
	,,	19	58 4	–	24 0	Bog.	
					2 0	Clay and gravel.	
					26 0		Stopped in clay and gravel.
	,,	20	60 0	–	22 0	Bog.	
					4 0	Clay and gravel.	
					26 0		Stopped in clay and gravel.
	,,	21	60 6	–	26 0	Bog.	Stopped in bog.
	,,	22	58 0	–	24 6	Bog.	
					1 6	Clay and gravel.	
					26 0		Stopped in clay and gravel.
	,,	23	51 0	–	15 3	Bog.	
					6 0	Clay and gravel.	
					21 3		Stopped in clay and gravel.

Appendix B. Registry of Borings.

Registry of Details of Borings from Tarmonbarry to Lough Nanogue—*Continued.*

Note.—The Datum Level is 25 feet below the present Lower Sill of Cloondrah Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Cloondrah—*Continued.* (Cloondrah. See Pl. No. 30.)	Pl. 31	24	50 0	-	12 0	Bog.	
					6 0	Clay and gravel.	
					18 0		Found rock.
	"	25	48 8	–	16 6	Bog.	
					4 6	Clay and gravel.	
					21 0		Found rock.
	"	26	50 6	–	17 6	Bog.	
					4 6	Clay and gravel.	
					22 0		Stopped in clay and gravel.
	"	27	50 0	–	13 6	Bog.	
					4 6	Clay and gravel.	
					18 0		Found rock.
	"	28	44 0	–	11 0	Bog.	
					5 6	Clay and gravel.	
					16 6		Found rock.
	"	29	44 0	–	12 0	Bog.	
					3 9	Clay and gravel.	
					15 9		Found rock.
	"	30	44 3	–	10 0	Bog.	
					6 9	Clay and gravel.	
					16 9		Stopped in clay and gravel.
	"	31	45 8	–	13 6	Bog.	
					8 0	Clay and gravel.	
					21 6		Stopped in clay and gravel.
	"	32	42 9	–	9 6	Bog.	
					12 6	Clay and gravel.	
					22 0		Stopped in clay and gravel.
	"	33	41 3	–	10 0	Alluvial soil.	
					8 6	Clay and gravel.	
					18 6		Stopped in clay and gravel.
	"	34	40 10	–	12 6	Alluvial soil.	
					6 0	Clay and gravel.	
					18 6		Stopped in clay and gravel.
	"	35	40 0	–	14 6	Alluvial soil.	
					9 0	Clay and gravel.	
					23 6		Stopped in clay and gravel.
Lough Forbes, near the iron pile, in the middle of the Lough. (See Pl. No. 33.)	Pl. 34	1	29 7	–	4 10	Gravel and clay.	These borings being sufficient for the required deepening, it was considered unnecessary to examine any farther; the clay and gravel continues deeper.
	"	2	29 7	–	4 0	Gravel and clay.	
	"	3	28 1	–	3 9	Gravel and clay.	
	"	4	31 8	–	5 1	Gravel and clay.	
	"	5	31 7	–	5 8	Gravel and clay.	
	"	6	30 7	–	5 0	Gravel and clay.	
	"	7	32 3	–	5 8	Gravel and clay.	
	"	8	30 9	–	5 9	Gravel and clay.	
	"	9	30 7	–	4 10	Gravel and clay.	
	"	10	30 11	–	5 2	Gravel and clay.	
	"	11	30 2	–	5 7	Gravel and clay.	
	"	12	30 1	–	6 2	Gravel and clay.	
	"	13	–	–	10 0	Soil and clay.	
	"	14	–	–	17 4	Peaty soil and clay.	

Lough Forbes. (See Pl. No. 33.)

Appendix B.
Registry of Borings.

Clooneen Cox and Cloonfad.
(See Pl. No. 35.)

Bird Island.
(See Pl. No. 39.)

REGISTRY of Details of BORINGS from TARMONBARRY to LOUGH NANOGUE—*Continued.*

NOTE.—The Datum Level is 25 feet below present Lower Sill of CLOONDRAH LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.		Below.		Depth.		Nature of Soil bored through.	REMARKS.
			Ft.	In.	Ft.	In.	Ft.	In.		
CLOONEEN COX and CLOONFAD. (See Pl. No. 35.)	Between 1 – 2	1	31	8	–		5	4	Clay.	Found rock.
		2	32	8	–		3	6	Clay.	Found rock.
		3	32	3	–		13	8	Mud and gravel.	Found rock.
	Between 2 – 3	4	27	6	–		5	3	Gravel, stones, and clay.	Found stones at this depth.
		5	31	9	–		5	0	Gravel, stones, and clay.	Found stones.
		6	30	0	–		3	9	Gravel, stones, and clay.	Found stones.
		7	33	0	–		3	2	Gravel, stones, and clay	Found rock.
	Between 3 – 4	8	31	9	–		5	4	Gravel, stones, and clay.	Found rock.
		9	30	6	–		2	10	Gravel, stones, and clay.	Found stones.
		10	32	8	–		3	3	Gravel, stones, and clay.	Found stones.
		11	33	0	–		3	8	Gravel, stones, and clay.	Found stones.
		12	32	0	–		3	1	Gravel, stones, and clay.	Found rock.
	Between 4 – 5	13	34	0	–		6	0	Gravel, stones, and clay.	Found rock.
		14	34	7	–		5	4	Sand and gravel.	Found rock.
BIRD ISLAND. (See Pl. No. 39.)	A little below No. 1.	1	33	3	–		5	6	Gravel, clay and large stones.	Stopped in gravel.
		2	29	9	–		6	6	Gravel, clay, and large stones.	Found stone.
		3	29	10	–		6	3	Gravel, clay, and large stones.	Found rock.
		4	33	8	–		5	9	Gravel.	Found stone.
		5	30	0	–		4	4	Gravel and clay.	Found stone.
		6	30	2	–		5	4	Gravel and clay.	Found rock.
	Between 1 – 2	7	35	0	–		6	9	Gravel.	Found stone.
		8	32	11	–		5	2	Gravel and clay.	Found stone.
		9	31	8	–		4	3	Gravel and stones.	Found rock.
		10	35	8	–		10	11	Soil and gravel.	Found rock.
		11	34	6	–		4	4	Gravel and stones.	Found rock.
		12	35	4	–		7	4	Mud and gravel.	Found rock.
		13	37	0	–		8	4	Gravel and stones.	Stopped at a stone.
		14	34	1	–		4	10	Clay and gravel.	Found rock.
	2	15	36	0	–		6	6	Gravel and stones.	Stopped at a stone.
		16	36	7	–		5	4	Clay and gravel.	Found rock.
		17	32	8	–		4	10	Sand and gravel.	Found rock.
	Between 2 – 3	18	36	10	–		4	9	Gravel.	Found rock.
		19	34	3	–		5	7	Sand and gravel.	Found stone.
		20	36	4	–		7	0	Mud and gravel.	Stopped by large stone.
		21	32	0	–		3	0	Gravel, clay, and large stones.	Stopped in gravel.
		22	32	8	–		5	10	Gravel, clay, and large stones.	Found rock or stones.
	Between 3 – 4	23	35	6	–		13	7	Mud and gravel.	Stopped in gravel.
		24	30	6	–		3	10	Clay and gravel.	Stopped in clay and gravel.
		25	35	0	–		15	4	Mud and gravel.	Stopped in gravel.
		26	30	4	–		5	1	Clay and gravel.	Stopped in gravel.
		27	31	4	–		4	8	Clay and gravel.	Found rock.
	4	28	31	6	–		3	2	Clay and gravel.	Found stones.
	Between 3 – 4	29	35	0	–		6	6	Clay and gravel.	Found rock.

Appendix B.
Registry of Borings.

Bird Island.
(See Pl. No. 39.)

Rooskey.
(See Pl. No. 43.)

REGISTRY of Details of BORINGS from TARMONBARRY to LOUGH NANOGUE—*Continued.*

NOTE.—The Datum Level is 25 feet below the present Lower Sill of CLOONDRAH LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
BIRD ISLAND—*Continued.*	Between 3 & 4	30	33 10	–	9 11	Mud and clay.	Found rock.
	4	31	31 2	–	4 2	Clay and gravel.	Found rock.
ROOSKEY, In the Canal. (See Pl. No. 43.)	Between 3 – 4	1	36 10	–	5 3	Clay.	Found rock.
	Between 4 – 5	2	36 8	–	3 1	Clay.	”
		3	36 9	–	4 8	Mud and gravel.	”
	5 – 6	4	37 0	–	4 2	Gravel.	”
		5	37 0	–	3 4	Soft soil.	”
	Between 6 – 7	6	37 3	–	3 6	Soft soil and clay.	”
	7 – 8	7	37 3	–	4 9	Soft soil and clay.	”
		8	37 0	–	2 8	Clay.	”
	8 – 9	9	37 0	–	3 4	Clay.	”
		10	36 8	–	2 8	Clay.	”
	9 – 10	11	36 6	–	3 9	Clay.	”
		12	37 0	–	4 6	Clay.	”
	10 – 11	13	37 3	–	3 8	Clay.	”
	11 – 12	14	36 8	–	5 3	Clay.	”
	12 – 13	15	37 0	–	3 6	Clay.	”
		16	36 7	–	2 5	Clay.	”
	13 – 14	17	33 0	–	1 0	Gravel.	”
	14 – 15	18	36 3	–	0 0	No soil.	Here the rock forms the bed.
		19	36 10	–	2 4	Clay.	Found rock.
	15 – 16	20	37 0	–	2 5	Clay.	”
	16 – 17	21	36 9	–	3 3	Clay.	”
	Near 17	22	37 2	–	2 3	Clay.	”
(Between the Canal and the River.)	Between 3 – 4	23	42 0	–	10 9	Clay.	”
	4 – 5	24	42 6	–	11 7	Clay.	”
		25	42 8	–	7 0	Clay.	”
	5 – 6	26	42 8	–	5 6	Clay.	”
		27	45 9	–	4 7	Clay.	”
	6 – 7	28	45 9	–	9 0	Clay.	”
	7 – 8	29	47 9	–	5 6	Clay.	”
		30	47 0	–	5 10	Clay.	”
	8 – 9	31	48 0	–	4 10	Clay.	”
		32	45 0	–	5 6	Clay.	”
	9 – 10	33	45 9	–	7 10	Clay.	”
		34	45 6	–	7 0	Clay.	”
	10 – 11	35	44 9	–	6 4	Clay.	”
	11 – 12	36	50 0	–	5 0	Gravel and clay.	”
	12 – 13	37	46 9	–	6 0	Gravel and clay.	”
	13 – 14	38	45 0	–	4 10	Gravel and clay.	”
	14 – 15	39	44 3	–	4 8	Gravel and clay.	”
	15 – 16	40	44 0	–	7 3	Gravel and clay.	”
	16 – 17	41	43 3	–	7 0	Gravel and clay.	”

Appendix B.
Registry of Borings.

Rooskey.
(See Pl. No. 43.)

REGISTRY of Details of BORINGS from TARMONBARRY to LOUGH NANOGUE—*Continued.*

NOTE.—The Datum Level is 25 feet below the present Lower Sill of CLOONDRAH LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.			
ROOSKEY—*Continued.* (River Borings.)	3	42	35 6	–	6 6	Gravel.	Found rock.
	Between 3 & 4	43	31 6	–	3 4	Sand.	”
		44	36 3	–	8 3	Gravel.	”
		45	36 0	–	7 8	Gravel.	”
		46	32 0	–	9 0	Clay.	”
		47	34 9	–	4 10	Sand.	”
		48	34 0	–	4 9	Gravel.	”
	4	49	36 0	–	5 1	Mud and sand.	”
		50	34 4	–	5 0	Gravel.	”
	Between 4 – 5	51	36 9	–	3 10	Sand.	”
		52	32 0	–	4 8	Sand.	”
		53	35 9	–	4 10	Clay.	”
	Between 5 – 6	54	39 3	–	5 0	Gravel and clay.	”
		55	32 9	–	5 0	Gravel and sand.	”
		56	35 6	–	3 4	Gravel and clay.	”
		57	39 9	–	4 7	Gravel.	”
		58	34 6	–	4 3	Gravel and clay.	”
		59	35 8	–	3 4	Gravel and clay.	”
	Between 6 – 7	60	36 6	–	4 8	Gravel.	”
		61	35 6	–	3 4	Gravel.	”
		62	37 0	–	–		This Boring was omitted.
	Between 7 – 8	63	35 0	–	6 4	Gravel.	Found rock.
		64	31 3	–	3 2	Clay.	”
		65	38 0	–	3 5	Clay.	”
		66	35 6	–	5 4	Sandy soil.	”
		67	30 6	–	3 5	Sandy soil.	”
		68	36 9	–	2 8	Clay.	”
	Between 8 – 9	69	35 8	–	6 4	Gravel.	”
		70	31 0	–	2 5	Sandy soil.	”
		71	36 6	–	3 5	Sandy soil.	”
		72	35 10	–	4 9	Sandy soil.	”
		73	30 6	–	3 0	Gravel.	”
		74	36 0	–	4 6	Sandy soil.	”
	Between 9 – 10	75	37 3	–	3 0	Sandy soil.	”
		76	32 9	–	4 0	Sandy soil.	”
		77	36 3	–	1 9	Sandy soil.	”
		78	37 9	–	5 6	Gravel.	”
		79	35 3	–	5 0	Sandy soil.	”
		80	36 6	–	4 2	Sandy soil.	”
	Between 10 – 11	81	39 0	–	4 3	Sand and gravel.	”
		82	35 6	–	2 9	Gravel.	”
		83	37 9	–	2 2	Gravel.	”
	Between 11 – 12	84	39 3	–	3 11	Gravel.	”
		85	36 6	–	2 2	Gravel.	”

Appendix B.
Registry of Borings.

REGISTRY of Details of BORINGS from TARMONBARRY to LOUGH NANOGUE—*Continued.*

NOTE.—The Datum Level is 25 feet below the present Lower Sill of CLOONDRAH LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
ROOSKEY, (River Borings) *Continued.*	Between 11 & 12	86	38 3	–	2 9	Gravel.	Found rock.
		87	36 7	–	3 8	Clay.	,,
		88	36 7	–	0 0	None.	The rock is naked at this point.
		89	37 3	–	2 0	Gravel.	Found rock.
		90	37 0	–	1 6	Gravel.	,,
		91	39 6	–	3 4	Clay.	,,
		92	37 3	–	1 9	Gravel.	,,
		93	38 0	–	1 1	Gravel.	,,
	Between 12 – 13	94	39 9	–	1 10	Gravel.	,,
		95	37 3	–	0 0	None.	Rock naked at this point.
		96	38 6	–	1 0	Gravel.	Found rock.
	Between 13 – 14	97	37 9	–	2 6	Gravel.	,,
		98	37 8	–	0 7	Gravel.	,,
		99	34 9	–	4 0	Sand.	,,
		100	38 0	–	5 0	Sand and clay.	,,
	Between 14 – 15	101	38 0	–	2 4	Sand.	,,
		102	34 9	–	2 10	Gravel.	,,
		103	35 3	–	3 7	Gravel and clay.	,,
	Between 15 – 16	104	39 0	–	3 6	Sand and gravel.	,,
		105	33 9	–	3 6	Gravel and clay.	,,
		106	36 9	–	8 1	Mud and clay.	,,
		107	32 0	–	3 4	Gravel.	,,
	Between 16 – 17	108	34 0	–	3 3	Mud and clay.	,,
		109	31 9	–	8 1	Mud and clay.	,,
		110	38 9	–	7 5	Mud and clay.	,,
DERRYCARNE. (See Pl. No. 46.)	Pl. 49	1	37 8	–	5 9	Gravel.	Stopped in gravel.
	,,	2	36 1	–	5 7	Gravel.	,,
	,,	3	38 1	–	5 5	Gravel.	,,
	,,	4	32 3	–	6 0	Mud.	,,
					5 9	Gravel.	,,
					11 9		
CARRIGEEN, On the Carnadoe Waters. (See Pl. No. 88.)	Pl. 89	1	19 11	–	13 10	Sand and marl.	Stopped in marl.
	,,	2	26 8	–	18 2	Sand and marl.	,,
	,,	3	32 8	–	15 7	Sand and marl.	,,
	,,	4	38 0	–	15 0	Sand and marl.	,,
	,,	5	39 0	–	15 7	Sand and marl.	,,
	,,	6	33 11	–	15 0	Sand and marl.	,,
	,,	7	32 6	–	16 6	Sand and marl.	,,
	,,	8	34 3	–	16 0	Sand and marl.	,,
	,,	9	36 0	–	15 3	Sand and marl.	,,
	,,	10	44 0	–	15 3	Sand and marl.	,,

Rooskey. (See Pl. No. 43.)

Derrycarne. (See Pl. No. 45.)

Carrigeen. (See Pl. No. 88.)

Appendix B.
Registry of Borings.

Carrigeen.
(See Pl. No. 88.)

Carnadoe Bridge.
(See. Pl. No. 87.)

REGISTRY of Details of BORINGS from TARMONBARRY to LOUGH NANOGUE—*Continued.*

NOTE.—The Datum Level is 25 feet below the present Lower Sill of CLOONDRAH LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
CARRIGEEN—*Continued.*	Pl. 89	11	35 6	–	16 9	Sand and marl.	Stopped in marl.
	"	12	36 0	–	16 9	Sand and marl.	"
	"	13	32 0	–	12 0	Sand and marl.	
					2 0	Clay.	
					14 0		Stopped in clay.
	"	14	39 0	–	10 0	Sand.	
					3 0	Clay.	
					13 0		"
	"	15	38 0	–	9 7	Marl.	
					3 7	Clay.	
					13 2		"
	"	16	38 8	–	14 0	Marl.	
					3 0	Clay.	
					17 0		"
	"	17	39 0	–	14 3	Marl.	
					1 9	Gravel.	
					16 0		Stopped in gravel.
	"	18	38 6	–	16 0	Marl.	Stopped in marl.
CARNADOE BRIDGE. (See Pl. No. 87.)	Pl. 87	1	36 8	–	17 0	Marl and soft soil.	Stopped in soft soil.
	"	2	38 9	–	19 0	Marl and soft soil.	"
	"	3	39 4	–	18 0	Marl and soft soil.	"
	"	4	37 11	–	2 6	Marl.	
					4 6	Gravel.	
					7 0		Stopped in gravel.
	"	5	38 7	–	8 0	Clay.	Stopped in clay.
	"	6	41 0	–	5 8	Clay.	"
	"	7	37 8	–	7 0	Clay.	"
	"	8	39 7	–	7 0	Marl and soft soil.	Stopped in soft soil.
	"	9	38 2	–	15 5	Marl and soft soil.	"
	"	10	39 7	–	13 8	Marl and soft soil.	
					3 0	Gravel.	
					16 8		Stopped in gravel.
	"	11	39 7	–	20 0	Marl and soft soil.	Stopped in soft soil.

T. BARTON, Civil Engineer.

21*st February,* 1839.

Appendix B.
Registry of Borings.

Jamestown Canal.
(See Pl. No. 61.)

Registry of Details of Borings from Lough Nanogue to Lough Allen.

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Jamestown Canal. (See Pl. No. 61.)	5	1	–	1 0	27 3 1 2	Alluvial clay. Soft clay and gravel.	
					28 5		Stopped in clay and gravel.
	Between 4 & 5	2	–	1 7	22 4	Alluvial clay.	Stopped in clay.
	9	3	–	7 0	11 0	Close strong clay and gravel.	Found rock.
	7	4	–	0 6	14 2 2 1	Alluvial clay. Soft clay and gravel.	
					16 3		Stopped in gravel.
	Between 8 & 9	5	–	1 6	4 10 2 5	Alluvial clay. Clay and gravel.	
					7 3		Stopped by a stone.
	Between 9 & 10	6	–	1 0	2 6 5 4	Alluvial clay. Strong clay, stones, and gravel.	
					7 10		Stopped by a stone.
	10	7	–	1 3	12 0	Strong clay, stones, and gravel.	Stopped by rock or large stone.
	Between 11 & 12	8	–	1 2	14 5	Strong clay, stones, and a little gravel.	Stopped in clay and gravel.
	12	9	–	1 9	11 11	Strong clay, stones, and some gravel.	Found rock.
	13	10	–	6 10	4 3 6 4	Hard clay and gravel. Close clay and gravel.	
					10 7		Stopped by a large stone or rock.
	14	10a.	–	6 5	1 0 3 9	Soft clay and mud. Hard clay and coarse gravel.	
					4 9		Stopped in clay and gravel.
	16	11	–	6 10	1 2 3 4	Soft clay and gravel. Hard clay and coarse gravel.	
					4 6		Stopped by large stone or rock.
	Between 17 & 18	12	–	1 6	4 1 1 4 0 7	Alluvial clay. Loose gravel. Close gravel and clay.	Made two other borings, in one found rock at 6 feet 1 inch; in the other, found rock at 6 feet 6 inches.
					6 0		Found rock.
	19	13	–	0 6	7 7 0 3	Alluvial clay. Loose gravel.	
					7 10		Found rock. Bored two other holes, one 8 feet, the other 8 feet 8 inches, found rock in each.
	Near 20	14	–	1 11	7 8 0 9	Alluvial clay. Gravel.	
					8 5		Found rock.
	Near 21	15	–	1 9	13 9	Alluvial clay.	Found gravel.
	Between 21 & 22	16	–	1 6	2 10 1 4 1 6 4 6	Alluvial clay. Loose gravel. Hard gravel. Strong clay and gravel.	
					10 2		Stopped in gravel.
	24	17	4 0	–	1 7 1 11 4 6 3 1	Dark soil. Yellow clay. Strong brown clay, gravel, and stones. Strong blue clay and gravel.	
					11 1		Found rock.

Appendix B.
Registry of Borings.

Jamestown Canal.
(See Pl. No. 61.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
JAMESTOWN CANAL—*Continued.*	26	18	10 6	–	2 2	Soil with some gravel.	
					2 3	Yellow clay and some gravel.	
					5 0	Brown clay and gravel.	
					9 5		Stopped in gravel.
	27	19	10 4	–	3 8	Mixed clay.	
					7 4	Dark strong clay and stones.	
					11 0		Found rock.
	Between 27 & 28	20	5 11	–	10 5	Strong clay, stones, and some gravel.	Stopped in gravel.
	Between 30 & 31	21	2 6	–	10 11	Soft clay and gravel.	Stopped in gravel.
	31	22	2 8	–	4 6	Mud or clay.	
					14 7	Peaty mud.	
					1 0	Black mud.	
					20 1		Stopped in mud.
	31	23	1 9	–	2 6	Mud or clay.	
					13 1	Peaty mud.	
					3 4	Soft blue clay.	
					0 8	Strong clay and gravel.	
					19 7		Stopped in clay and gravel.
	34	24	9 4	–	0 10	Peat.	
					3 8	Strong yellow and blue clay.	
					4 4	Strong blue clay and gravel.	
					8 10		Stopped in gravel.
	Between 36 & 37	25	6 3	–	7 9	Strong clay and fine gravel.	
					1 8	Strong clay, stones, and gravel.	
					9 5		Stopped in gravel.
	Between 36 & 37	26	4 2	–	0 11	Loose gravel.	
					1 11	Sand.	
					1 9	Strong clay and stones.	
					4 7		Stopped in clay.
	38	27	9 6	–	8 11	Hard clay and gravel.	The last 3 feet strong clay, gravel and stones; stopped in clay and gravel.
	On line of Trial Section for alteration of the Canal.	28	8 5	–	2 9	Alluvial clay.	
					7 5	Clay, gravel, and stones.	
					10 2		Stopped in gravel.
		29	9 0	–	8 0	Alluvial clay.	
					5 1	Strong clay and gravel.	
					13 1		Stopped in clay and gravel.
		30	11 0	–	3 6	Alluvial clay.	
					3 6	Soft clay and gravel.	
					2 8	Strong clay and gravel.	
					9 8		Found rock.
		31	11 2	–	4 3	Alluvial clay.	
					2 5	Loose gravel and clay.	Made other trials; met rock at 6 ft. 6 inches, and at 6 ft. 11 inches.
					6 8		Found rock.
		32	11 9	–	10 4	Alluvial clay.	
					0 4	Gravel.	
					10 8		Found rock.
		33	11 6	–	13 11	Alluvial clay.	
					1 1	Gravel and clay.	
					15 0		Stopped in gravel and clay.
		34	14 2	–	9 7	Peat.	Made two other borings in the drain beside this, one 12 feet, another 10 feet 3 inches; found rock in each.
					2 0	Soft clay and gravel.	
					4 3	Strong clay, and gravel and stones.	
					15 10		Found rock.

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Appendix B.
Registry of Borings.

Jamestown Canal.
(See Pl. No. 61.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
JAMESTOWN CANAL—*Continued.*	On line of Trial Section for alteration of the Canal—*Continued.*	35	17 2	–	7 7 3 5	Peat. Strong clay, stones, and gravel.	Bored 2 feet from last boring; found rock at 11 feet 10 inches.
					11 0		Found rock.
		36	14 3	–	9 1 4 0	Peat. Soft clay and gravel.	
					13 1		Found rock.
		37	16 9	–	8 1 4 3	Peat. Soft clay and gravel.	
					12 4		Found rock.
		38	16 0	–	13 6 3 8 1 6	Peat. Soft clay and gravel. Strong clay and gravel.	
					18 8		Stopped in gravel.
		39	14 10	–	12 0 3 6	Peat. Soft clay and gravel.	
					15 6		Found rock.
		40	10 0	–	2 4 0 8 0 11 2 11 1 5	Soil. Loose gravel. Soft clay and gravel. Gravel and clay. Loose gravel.	
					8 3		Found rock.
		41	8 6	–	4 7 0 3 3 2 0 8 3 5	Alluvial clay. Gravel. Alluvial clay. Loose gravel. Clay, gravel, and stones.	
					12 1		Found rock.
	Between 40 & 41	42	4 4	–	0 9 2 11	Mud and gravel. Clay and gravel.	
					3 8		Found rock.
	Near 41	43	4 3	–	0 11 2 1	Mud. Soft slaty calp.	
					3 0		Stopped in calp.
	Between 46 & 47	44	6 0	–	1 1 5 1	Clay and gravel. Stones, gravel, and clay.	
					6 2		Found rock.
	Near 47	45	5 3	–	4 1 1 10 0 7	Clay and gravel. Stones, clay, and gravel. Soft clay and gravel.	
					6 6		Found rock.
	Near 48	46	5 4	–	3 8	Hard gravel and clay.	Found rock.
	Near 54	47	5 7	–	4 9 1 0	Strong clay and gravel. Soft clay and gravel.	
					5 9		Found rock.
	55	48	5 9	–	6 0	Strong clay, stones, and gravel.	Found rock.
	Between 55 & 56	49	5 0	–	7 6	Strong clay, stones, and gravel.	Found rock.
	Between 56 & 57	50	6 0	–	6 2	Strong clay and gravel.	Found rock.
	Between 70 & 71	51	6 1	–	6 3 1 10	Mud and sand. Loose gravel and clay.	
					8 1		Found rock.
							NOTE.—Bored two other holes here—one 3 feet nearer the bridge, to 7 8—the other 3 feet farther from the bridge, to 8 7; found rock in each.

Appendix B.
Registry of Borings.

Jamestown Canal.
(See Pl. No. 61.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
JAMESTOWN CANAL—*Continued.*	Between 71 & 72	52	5 9	–	2 0	Mud and loose gravel.	
					5 0	Alluvial clay.	
					1 3	Soft clay and gravel.	
					0 11	Strong clay and gravel.	
					9 2		Found rock.
	Between 70 & 71	53	6 0	–	9 0	Alluvial clay.	
					4 0	Soft clay and gravel.	
					0 10	Strong clay and gravel.	
					13 10		Found rock.
	Near 71	54	7 7	–	10 5	Alluvial clay.	
					4 3	Soft clay and gravel.	
					14 8		Found rock.
	Between 71 & 72	55	7 0	–	1 3	Soil.	
					9 8	Alluvial clay.	
					2 8	Loose gravel.	
					13 7		Stopped by a stone.
	Near 72	56	6 9	–	11 2	Alluvial clay.	
					2 10	Loose gravel.	
					0 2	Close gravel.	
					14 2		Found rock.
	Between 72 & 73	57	6 0	–	3 0	Alluvial clay.	
					11 9	Loose gravel.	
					14 9		Found rock.
	Between 72 & 73	58	7 0	–	8 9	Alluvial clay.	
					2 10	Loose gravel.	
					11 7		Found rock.
	Between 74 & 75	59	4 6	–	12 9	Alluvial clay.	
					3 5	Loose gravel.	
	In rushes.				0 6	Close gravel.	
					16 8		Stopped in close gravel.
	Near 75	60	6 6	–	5 2	Clay of different colours, mixed with sand.	
	On Small Island.				7 8	Loose gravel and clay.	
					12 10		Stopped by a stone.
DRUMSNA. (See Pl. No. 54.)	27	1	–	6 8	1 0	Loose gravel.	
					1 1	Close gravel and clay.	
					2 1		Found rock.
	27	2	–	6 11	2 2	Loose gravel.	
					0 8	Close gravel and clay.	
					2 10		Found rock.
	27	3	–	5 6	0 9	Loose gravel.	
					1 3	Close gravel.	
					2 0		Found rock.
	22	4	–	5 1	1 6	Loose gravel.	Found rock.
	Near 20	5	–	3 8	0 9	Loose gravel.	
					2 8	Close gravel and clay.	
					3 5		Found rock.
	Near 19	6	–	5 2	1 3	Loose gravel.	Found rock. At 7 feet nearer Leitrim side found rock at 11 inches; same distance Roscommon side, found rock at 1 foot 2 inches.
	Near 19	7	–	2 4	3 4	Strong gravel and clay.	Found rock.
	18	8	–	2 6	2 8	Loose gravel.	Found rock.
	Near 16	9	–	5 2	1 3	Loose gravel.	Found rock.
	12	10	–	7 4	0 8	Loose gravel.	Found rock.

Drumsna.
(See Pl. No. 54.)

Appendix B.
Registry of Borings.

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
DRUMSNA—*Continued.* (Drumsna. See Pl. No. 54.)	10	11	–	4 5	5 5	Clay, stones, and gravel.	Stopped in gravel.
	8	12	–	6 0	3 9	Close gravel.	Found rock.
	8	13	–	5 3	3 1	Very hard close gravel.	Found rock.
	Near 7	14	–	3 10	1 11	Loose gravel.	
					1 1	Sand.	
					2 3	Soft clay, and a little gravel.	
					3 0	Strong clay and gravel.	
					8 3		Found rock.
	"	15	–	7 6	1 3	Coarse gravel.	Found rock a few yards above this, and also a few yards further out in the river met rock at 1 foot 1 inch; on Section 9 the rock is bare at the Leitrim side; on the Roscommon side it is in clefts, with a little gravel in some places.
MOUNT CAMPBELL and CHARLES-TOWN. (See Pl. No. 56.)	Below 25	1	–	10 3	2 1	Clay and gravel.	Found rock.
		2	–	10 6	3 1	Alluvial clay.	Found gravel.
	Near 24	3	–	7 10	1 4	Loose gravel.	
					2 10	Clay and gravel.	
					4 2		Found rock.
	21	4	–	3 0	1 1	Loose gravel.	
					7 11	Clay, stones, and gravel.	
					9 0		Stopped in clay.
	21	5	–	4 7	0 3	Loose gravel.	
					4 4	Clay and stones.	
					4 7		Found rock.
	Near 19	6	–	2 2	1 6	Gravel.	
					0 6	Sand.	
					3 11	Clay and gravel.	
					5 11		Found rock.
	Near 4	7	–	1 0	6 0	Clay and stones.	Found rock.
	2	8	–	1 3	8 8	Clay and gravel.	Found rock.
	Between 13 & 14	9	–	0 10	8 3	Clay and stones.	Found rock.
	Near 13	10	–	1 1	8 7	Clay and gravel.	
					0 4	Stone.	
					2 3	Clay, stones, and gravel.	
					11 2		Stopped in gravel.
	12	11	–	4 7	5 2	Soft clay.	
					2 0	Clay and gravel.	
					7 2		Stopped in clay.
	12	12	–	6 11	4 8	Soft clay and gravel.	Stopped in clay and gravel.
	Near 28	13	–	4 8	1 2	Mud and gravel.	
					0 8	Clay and gravel.	
					3 1	Hard close gravel.	
					4 11		Found rock.
		14	–	4 10	3 5	Loose gravel.	
					0 10	Close gravel and stones.	
					4 3		Found rock.
		15	–	3 8	1 9	Hard gravel.	Found rock.
	29	16	–	5 2	2 9	Blue clay and gravel.	Found rock.
	29	17	–	3 6	2 11	Blue clay and gravel.	Found rock.
	29	18	–	3 5	1 11	Clay and gravel.	Found rock.
	Near 30	19	–	7 4	1 7	Clay and gravel.	
					2 3	Clay and stones.	
					3 10		Stopped in clay.

Mount Campbell and Charlestown. (See Pl. No. 56.)

Appendix B.
Registry of Borings.
Jamestown.
(See Pl. No. 58.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
JAMESTOWN. (See Pl. No. 58.)	31	1	5 0	–	12 0	Alluvial clay.	
					0 11	Sand.	
					1 5	Soft clay.	
					1 0	Loose gravel.	
					2 0	Gravel, stones, and clay.	
					0 6	Very strong gravel.	
					3 5	Clay and gravel.	
					21 3		Found rock.
	33	2	4 0	–	15 2	Alluvial clay.	
					0 11	Sand.	
					0 7	Loose gravel.	
					2 8	Soft clay.	
					19 4		Found rock.
	33	3	–	7 10	1 5	Alluvial clay.	
					4 5	Loose gravel.	
					1 7	Close gravel.	
					7 5		Found rock.
	33	4	–	6 8	5 0	Loose gravel.	
					1 6	Gravel and clay.	
					6 6		Found rock.
	33	5	–	3 10	2 0	Loose gravel.	
					1 11	Clay and gravel.	
					1 8	Strong gravel.	
					5 7		Found rock.
	31	6	5 3	–	13 0	Mud and clay.	
					1 4	Loose gravel.	
					2 2	Soft clay.	
					1 7	Clay, stones, and gravel.	
					18 1		Found rock.
	31	7	–	3 0	0 6	Loose gravel.	
					3 0	Soft clay and gravel.	
					3 6		Found rock.
	31	8	–	1 8	4 0	Clay and gravel.	Found rock.
	29	9	–	3 8	1 4	Loose gravel.	
					3 6	Close gravel and clay.	
					1 5	Close gravel.	
					6 3		Stopped in gravel.
	29	10	–	1 9	0 10	Loose gravel.	
					1 4	Soft clay.	
					0 3	Gravel.	
					1 9	Clay with some gravel.	
					2 5	Very close gravel.	
					6 7		Stopped in gravel.
	29	11	5 6	–	10 6	Mixture of clay and mud.	
					1 8	Sand.	
					0 9	Loose gravel.	
					2 2	Soft clay and some gravel.	
					6 6	Clay and stones.	
					21 7		Found rock.
	26	12	–	4 6	1 6	Loose gravel.	
					2 0	Close clay and gravel.	
					3 6		Stopped in clay and gravel.
	26	13	–	5 6	2 6	Hard close gravel.	Stopped in gravel.
	Near 25½	14	–	4 9	1 6	Loose gravel.	
					1 0	Close clay and gravel.	
					2 6		Found rock.
	Near 25½	15	–	1 6	4 6	Loose gravel.	
					2 5	Close clay and gravel.	
					6 11		Stopped in clay and gravel.
	25	16	1 0	–	1 7	Loose stones and gravel.	
					3 1	Strong gravel.	
					4 8		Stopped in gravel.

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Appendix B.
Registry of Borings.

Jamestown.
(See Pl. No. 58.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above. Ft. In.	Below. Ft. In.	Depth. Ft. In.	Nature of Soil bored through.	REMARKS.
JAMESTOWN—*Continued.*	Near 24	17	0 0	0 0	1 5	Loose gravel.	Found rock.
	Near 3	18	2 9	–	1 11 5 4	Coarse sand and gravel. Strong clay and gravel.	
					7 3		Stopped in clay and gravel.
	Near 3	19	–	0 7	0 7 5 3	Loose gravel. Clay and gravel.	
					5 10		Found rock.
	Near 43	20	–	0 7	0 8 3 7	Loose gravel. Clay and gravel.	
					4 3		Found rock.
	Between 4 & 5	21	2 0	–	0 2 9 1	Loose gravel. Strong clay and gravel.	
					9 3		Stopped in clay and gravel.
	Between 4 & 5	22	0 0	0 0	1 1 0 7	Loose gravel. Clay.	
					1 8		Found rock.
	Between 4 & 5	23	–	0 1	1 1 0 6	Loose gravel. Clay and some gravel.	
					1 7		Found rock.
	Between 6 & 7	24	1 1	–	1 1 1 3	Loose gravel. Strong gravel.	
					2 4		Found rock.
	Between 6 & 7	25	0 4	–	0 10 1 2 0 7 1 6	Loose gravel. Close gravel and clay. Clay and some gravel. Very strong gravel.	
					4 1		Found rock.
	Between 6 & 7	26	0 6	–	2 1 0 9 0 6	Clay and some gravel. Clay and stones. Close clay and gravel.	
					3 4		Found rock.
	8	27	0 2	–	1 5 4 5	Loose gravel. Strong gravel and clay.	
					5 10		Found rock.
	8	28	–	0 5	1 1 1 3	Loose gravel. Close gravel and clay.	
					2 4		Found rock.
	8	29	6 3	–	1 11 4 7	Peaty clay soil. Close gravel.	
					6 6		Stopped by a stone.
	8	30	7 3	–	0 10 5 4	Peaty clay soil. Gravel and large stones.	
					6 2		Stopped by a stone.
	9	31	6 0	–	6 0 0 10 2 2 1 11	Alluvial clay. Gravel. Mud. Loose gravel.	
					10 11		Found rock.
	9	32	6 11	–	9 3 3 9	Alluvial clay. Loose gravel.	
					13 0		Found rock.
	10	33	6 0	–	3 9 0 4	Alluvial clay. Gravel.	
					4 1		Found rock.

Appendix B.
Registry of Borings.

Jamestown.
(See Pl. No. 58.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
JAMESTOWN—*Continued.*	10	34	6 3	–	1 0	Moory soil.	
					0 4	Gravel.	
					2 0	Mud.	
					1 4	Gravel.	
					4 8		Found rock.
	Near 11	35	2 2	–	1 4	Loose gravel.	
					4 0	Close gravel and clay.	
					5 4		Found rock.
	11	36	5 6	–	2 6	Gravel.	Found rock.
	11	37	9 9	–	2 5	Gravel and clay.	Found rock.
	31	38	1 3	–	1 3	Strong gravel.	
					1 5	Close gravel and clay.	
					0 10	Mud and sand.	
					0 7	Clay and gravel.	
					4 1		Found rock.
	Between 31 & 13	39	1 11	–	1 9	Very loose gravel.	
					1 1	Close gravel and clay.	
					2 10		Found rock.
	Near 13	40	0 8	–	2 6	Close gravel and clay.	
					1 10	Softer gravel and clay.	
					2 3	Mud.	
					2 7	Loose gravel.	
					1 6	Very fine sand.	
					2 4	Loose fine gravel.	
					2 0	Coarse sand.	
					15 0		Stopped in sand.
	37	41	1 6	–	2 8	Loose gravel, clay and sand.	Found rock.
							A little nearer the weir, on the same section, found rock at 2 10; from this to the bridge, the rock is almost bare on the Roscommon side.
	14	42	1 9	–	2 0	Close gravel and clay.	Found rock.
	14	43	1 4	–	4 3	Close gravel and clay.	Found rock.
	14	44	0 6	–	1 0	Loose gravel.	
					3 0	Close gravel and clay.	
					4 0		Found rock.
	15	45	–	0 7	2 2	Loose gravel and clay.	
					2 0	Close gravel and clay.	
					2 8	Hard gravel and clay.	
					6 10		Found rock.
	15	46	0 0	0 0	2 5	Loose gravel.	
					3 0	Close gravel and clay.	
					5 5		Found rock.
	15	47	1 8	–	4 4	Close strong gravel.	Stopped in gravel.
	15	48	1 6	–	2 2	Strong clay.	Found rock.
	15	49	1 10	–	3 8	Strong gravel.	Found rock.
KILBRIDE DEER PARK. (See Pl. No. 64.)	Between Nos. 6 & 7	1	2 0	–	5 2	Close gravel.	Stopped in a bed of strong gravel.
		2	0 4	–	3 8	Loose gravel.	Stopped in a bed of strong gravel.
		3	–	0 5	4 5	Loose gravel.	
					2 1	Close gravel.	
					6 6		Found rock.
		4	–	0 4	5 10	Loose gravel, clay, & stones.	Found rock.
		5	–	1 5	2 10	Loose gravel.	Found rock.

Kilbride Deer Park.
(See Pl. No. 64.)

Appendix B.
Registry of Borings.

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
DOYLE'S ISLANDS, (See Pl. No. 65.)	9	1	–	1 1	3 0	Loose gravel.	Found limestone rock.
	9	2	0 8	–	6 2	Close gravel.	Found rock.
	Between 8 & 9	3	–	1 11	5 4	Loose gravel.	Found rock.
	8	4	–	1 2	0 1	Gravel.	Found rock.
	8	5	–	1 3	1 8	Loose gravel.	Found rock.
	8	6	–	0 10	2 1	Loose gravel.	Found rock.
	8	7	–	0 1	2 10	Close gravel.	Found rock.
	7	8	–	0 1	2 9	Loose gravel.	
					0 6	Close gravel.	
					3 3		Found rock.
	7	9	0 6	–	0 5	Sand.	
					3 0	Loose gravel.	
					3 5		Found rock.
	6	10	–	1 1	4 9	Gravel.	Found rock.
	6	11	–	1 3	1 6	Loose gravel.	
					5 4	Close gravel and clay.	
					6 10		Found rock.
	Near 5	12	–	1 6	3 0	Loose gravel.	
					1 4	Close gravel.	
					0 5	Limestone rock.	
					4 9		Stopped in rock.
	Near 4	13	–	1 5	2 2	Loose gravel.	Stopped by a stone. Not fixed on Survey; it is about 70 feet up stream side of No. 12.
CORNACORROO. (See Pl. No. 66.)	1	1	–	1 1	0 3	Loose gravel and sand.	
					4 3	Clay and gravel.	
					4 6		Stopped in clay and gravel.
	1	2	–	3 5	1 0	Loose gravel.	
					2 5	Soft clay, and some gravel.	
					3 5		Stopped in clay and gravel.
	3	3	–	1 6	1 0	Loose gravel.	
					3 10	Soft clay and gravel.	
					4 10		Stopped in clay and gravel.
	3	4	–	0 10	0 4	Loose gravel.	
					5 4	Soft clay and gravel.	
					5 8		Stopped in clay and gravel.
	11	5	1 10	–	2 3	Loose gravel.	
					3 6	Close gravel and clay.	
					5 9		Stopped in gravel.
	11	6	–	0 3	7 1	Close gravel and clay.	Stopped in gravel.
	8	7	–	0 11	0 10	Loose gravel.	
					5 0	Close gravel and clay.	
					5 10		Stopped in gravel.
	8	8	–	2 0	1 1	Loose gravel.	
					4 2	Close gravel and clay.	
					5 3		Stopped in gravel.
	9	9	–	1 5	0 7	Loose gravel.	
					4 5	Close gravel, stones, & clay.	
					5 0		Stopped in gravel.
	9	10	0 0	0 0	1 1	Loose gravel.	
					5 5	Close gravel.	
					6 6		Stopped in gravel.

Doyle's Islands. (See Pl. No. 65.)

Cornacorroo. (See Pl. No. 66.)

Appendix B. Registry of Borings.

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Cornacorroo. (See Pl. No. 66.)

Innishmucker. (See Pl. No. 67.)

Grose's Islands. (See Pl. No. 68.)

Carrick-on-Shannon. (See Pl. No. 69.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
CORNACORROO—*Continued.*	10	11	–	2 6	1 6	Loose gravel.	
					2 4	Close gravel and clay.	
					3 10		Stopped by rock or large stone.
	10	12	–	1 6	1 6	Loose gravel.	
					4 3	Close gravel and clay.	
					5 9		Stopped in gravel.
INNISHMUCKER. (See Pl. No. 67.)	2	1	1 10	–	12 2	Mud.	Stopped in mud.
	2	2	0 4	–	10 8	Mud.	Stopped in mud.
	Near 4	3	0 8	–	11 0	Mud.	Stopped in mud.
		4	0 6	–	10 10	Mud.	Stopped in mud.
	Between 5 & 6	5	0 5	–	10 9	Mud.	Stopped in mud.
		6	1 6	–	11 4	Mud.	Stopped on gravel.
GROSE'S ISLANDS (See Pl. No. 68.)	Near C. D.	1	–	2 9	2 4	Gravel.	Stopped in gravel.
		2	6 6	–	3 5	Mud.	
					7 1	Loose gravel and clay.	
					10 6		Stopped in gravel.
	Near 3	3	–	2 6	2 10	Loose gravel.	Stopped in gravel.
	Near C. D.	4	–	0 6	5 9	Strong gravel.	Stopped by a stone.
		5	0 4	–	4 11	Gravel.	Stopped in gravel.
	Near 2	6	–	1 6	2 6	Close gravel.	
					0 3	Loose gravel.	
					5 9	Strong gravel.	
					8 6		Stopped in strong gravel.
	Near A. B.	7	6 6	–	1 9	Moory soil.	
					5 1	Fine gravel.	
					2 6	Loose gravel.	
					9 4		Stopped by a stone.
		8	8 6	–	1 9	Moory soil.	
					1 3	Yellow clay.	
					0 10	Blue clay.	
					4 0	Close gravel.	
					1 1	Large stones and gravel.	
					8 11		Stopped by a stone.
		9	7 6		0 7	Mud.	
					4 0	Gravel.	
					4 7		Stopped by a stone.
	–	10	–	0 5	3 7	Soft mud.	
					0 9	Sand.	
					1 6	Loose gravel.	
					0 4	Close gravel.	
					6 2		Stopped in gravel.
	–	11	–	2 0	2 5	Loose gravel.	
					1 10	Strong gravel and clay.	
					4 3		Stopped in gravel.
CARRICK-ON-SHANNON. (See Pl. No. 69.)	Near 6	1	3 0	–	6 8	Loose gravel.	
					0 9	Close gravel.	
					7 5		Stopped in gravel.
	Between 5 & 6	2	8 0	–	2 8	Soil.	
					8 4	Loose gravel.	
					0 10	Close gravel.	
					0 5	Sand.	
					1 1	Close gravel and clay.	
					13 4		Stopped in gravel.

Appendix B. Registry of Borings. Carrick-on-Shannon. (See Pl. No. 69.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
CARRICK-ON-SHANNON—*Continued.*	6	3	9 6	–	3 0	Soil.	
					7 0	Loose gravel.	
					4 0	Close gravel.	
					14 0		Stopped in gravel.
	Near 7	4	8 3	–	0 10	Soil.	
					3 11	Gravel and clay.	
					1 7	Soft clay.	
					2 8	Close gravel and clay.	
					9 0		Stopped by a stone.
	Near 10	5	3 8	–	1 0	Loose gravel.	
					1 6	Close gravel and clay.	
					0 4	Stone.	
					2 10		Stopped by a stone.
	Between 10 & 12	6	4 5	–	2 2	Strong gravel.	Found rock.
		7	3 9	–	1 2	Fine gravel and stones.	
					0 9	Close gravel.	
					1 11		Found rock.
		8	3 0	–	0 5	Fine loose gravel.	
					0 6	Sand.	
					1 2	Loose gravel.	
					0 5	Close gravel.	
					0 3	Stone.	
					2 4	Close gravel.	
					5 1		Found rock.
	9	9	–	6 1	0 9	Loose gravel.	
					0 9	Coarse gravel.	
					1 6		Found rock.
	Near 9	10	3 6	–	3 0	Loose gravel.	
					0 9	Close gravel.	
					3 9		Found rock.
	Between 10 & 12	11	–	0 1	2 7	Loose gravel.	
					0 4	Close gravel.	
					0 8	Sand.	
					0 11	Close gravel.	
					4 6		Stopped by a stone.
	Near 8	12	1 2	–	0 11	Loose gravel.	
					1 1	Sand.	
					0 9	Loose gravel and clay.	
					0 9	Close gravel.	
					0 5	Fine sand.	
					1 7	Very close gravel.	
					5 6		Found rock.
	Between 8 & 9	13	3 1	–	4 0	Loose gravel and sand.	
					2 9	Close gravel and clay.	
					6 9		Met large stone or rock.
	Between 10 & 12	14	2 3	–	2 9	Loose gravel.	
					1 9	Close gravel.	
					4 6		Found rock.
	Between 13 & 14	15	3 0	–	3 8	Loose gravel.	
					0 10	Close gravel.	
					4 6		Stopped by a stone.
	13	16	0 7	–	1 8	Loose gravel.	
					1 9	Very loose fine gravel.	
					0 3	Stone.	
					0 8	Gravel and stones.	
					0 1	Stone.	
					4 5		Found rock.

Appendix B.
Registry of Borings.

Carrick-on-Shannon.
(See Pl. No. 69.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
CARRICK-ON-SHANNON—*Continued.*	Near 13	17	1 7	–	1 9	Loose gravel.	
					2 10	Close gravel and clay.	
					0 3	A bed of small stones.	
					3 3	Gravel mixed with clay.	
					0 6	Very close gravel.	
					8 7		Stopped in gravel.
		18	2 2	–	0 4	Loose gravel.	
					2 5	Close gravel.	
					1 7	Strong gravel and clay.	
					4 2	Loose gravel with more clay.	
					0 8	Strong gravel.	
					9 2		Found rock.
	Near 15 & 19	19	3 3	–	1 2	Loose gravel.	
					9 6	Close gravel and clay.	
					10 8		Stopped by a large stone or rock.
	Near 16 & 19	20	2 6	–	4 6	Mud and gravel.	
					1 4	Loose gravel.	
					1 6	Soft clay.	
					0 10	Close gravel.	
					1 6	Clay and gravel.	
					9 8		Found rock.
	Near 19	21	5 0	–	15 0	Mud.	
					3 0	Gravel.	
					18 0		Stopped in gravel.
	–	22	7 5	–	12 10	Mud.	
					4 2	Gravel.	
					17 0		Stopped in gravel.
	Near 17	23	6 0	–	16 11	Mud.	Stopped in mud.
	Near 18	24	6 3	–	16 11	Blue mud.	Stopped in mud.
	–	25	6 2	–	16 11	Mud.	Stopped in mud.
HARTLEY. (See Pl. No. 71.)	Between 3 & 4	1	–	0 6	0 10	Mud.	
					0 11	Loose gravel.	
					3 9	Sand.	
					3 4	Clay and gravel.	
					8 10		Stopped in clay and gravel.
		2	–	1 1	1 2	Mud.	
					3 4	Soft clay and gravel.	
					4 6		Stopped in clay and gravel.
	5	3	–	0 9	2 4	Loose gravel and sand.	
					2 6	Soft clay and gravel.	
					4 10		Stopped in clay and gravel.
	Between 5 & 6	4	–	0 3	0 4	Loose gravel.	
					1 3	Sand.	
					1 9	Loose gravel and sand.	
					1 9	Loose gravel and soft clay.	
					5 1		Stopped in clay and gravel.
	Between 7 & 8	5	–	0 3	5 4	Loose gravel.	Stopped in gravel.
		6	–	0 11	4 8	Loose gravel.	Stopped in gravel.
PORT. (See Pl. No. 72.)	21	1	–	0 5	0 5	Loose gravel.	
					5 0	Very hard gravel.	
					5 5		Found rock.
	21	2	–	1 4	3 6	Very loose gravel.	Found rock.
	21	3	3 6	–	1 10	Mud, and some gravel.	
					3 8	Very loose gravel.	
					5 6		Found rock.
	19	4	–	0 5	7 7	Strong gravel and clay.	Found rock.

Hartley.
(See Pl. No. 71.)

Port.
(See Pl. No. 72.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Appendix B. Registry of Borings.

Port. (See Pl. No. 72.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
PORT—*Continued.*	19	5	1 0	–	2 10	Loose gravel.	
					2 7	Close gravel.	
					5 5		Stopped in gravel.
	19	6	1 5	–	4 10	Loose gravel.	Found rock.
	17	7	1 5	–	2 3	Loose gravel.	
					4 5	Close clay and gravel.	
					6 8		Stopped in gravel.
	17	8	0 7	–	3 4	Loose gravel.	
					1 8	Close gravel and clay.	
					5 0		Stopped in gravel.
	17	9	1 4	–	0 11	Loose gravel.	Found rock.
	15	10	1 1	–	2 9	Loose gravel.	Found rock.
	15	11	1 0	–	4 0	Loose gravel.	
					1 6	Very hard gravel.	
					5 6		Stopped in gravel.
	15	12	1 7	–	0 11	Mud.	
					4 2	Loose gravel.	
					1 3	Hard gravel.	
					6 4		Found rock.
	15	13	1 9	–	0 10	Soft mud.	
					6 1	Loose gravel.	
					0 6	Hard gravel.	
					7 5		Stopped in gravel.
	15	14	3 10	–	1 9	Mud.	
					0 11	Strong gravel.	
					4 3	Soft mud and fine sand.	
					2 0	Loose gravel.	
					3 5	Very close gravel and clay.	
					12 4		Found rock.
	13	15	–	1 4	0 6	Loose gravel.	Found rock.
	13	16	–	4 8	2 3	Loose gravel.	
					0 5	Close gravel.	
					2 8		Stopped in gravel.
	13	17	2 5	–	3 3	Mud.	
					1 0	Loose gravel.	
					6 2	Sand and mud.	
					2 8	Sand and gravel.	
					13 1		Stopped in gravel.
	12	18	–	4 8	3 8	Loose gravel.	Found rock.
	11	19	–	3 4	7 4	Sand and loose gravel.	
					0 3	Close gravel.	
					7 7		Stopped in gravel.
	11	20	–	0 11	1 2	Mud.	
					4 9	Mud, sand, and gravel.	
					2 5	Loose gravel.	
					8 4		Found rock.
	8	21	–	1 2	1 6	Loose gravel.	
					2 11	Close gravel and clay.	
					4 5		Stopped in gravel.
	7	22	–	4 1	4 7	Loose gravel.	Met close gravel.
	17	23	8 0	–	0 8	Blue clay and gravel.	
					0 8	Soil.	
					3 0	Soft yellow clay.	
					1 2	Soft blue clay.	
					2 11	Stiff blue clay.	
					2 10	Strong clay and stones.	
					11 3		Stopped in gravel and stones.

Appendix B.
Registry of Borings.

Port.
(See Pl. No. 72.)

Registry of Details of Borings from Lough Nanogue to Lough Allen—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.		Below.		Depth.	Nature of Soil bored through.	REMARKS.
			Ft.	In.	Ft.	In.	Ft. In.		
PORT—*Continued.*	Between 16 & 17	24	9	3	–		3 6	Blue and yellow clay.	
							0 6	Fine gravel.	
							2 0	Stiff blue clay.	
							2 0	Strong clay and gravel.	
							0 5	Stiff clay.	
							8 5		Found rock.
	16	25	9	2	–		0 8	Clay and gravel.	
							3 10	Dark clay.	
							0 10	Clay and gravel.	
							5 4		Found rock.
	16	26	7	0	–		3 9	Dark mud.	
							3 1	Loose gravel and clay.	
							2 1	Strong clay and gravel.	
							8 11		Found rock.
	Between 16 & 15	27	8	0	–		3 10	Alluvial clay.	Found rock.
	Centre 16 & 15	28	7	6	–		10 4	Mud.	
							0 11	Sand.	
							1 5	Stones and gravel.	
							12 8		Stopped in gravel.
	5	29	8	0	–		1 4	Soil.	
							1 2	Yellow clay.	
							0 9	Blue clay.	
							3 4	Strong clay and gravel.	
							6 7		Found rock.
	4	30	8	3	–		1 5	Dark mud.	
							15 5	Blue clay and some gravel.	
							16 10		Found rock.
	4	31	8	6	–		1 0	Soil.	
							4 7	Yellow clay.	
							1 1	Blue clay.	
							10 2	Blue clay and gravel.	
							16 10		Stopped in clay.
	3	32	8	4	–		2 4	Moory soil.	
							2 1	Yellow and white clay.	
							2 7	Blue clay.	
							8 9	Turf mud.	
							2 0	Blue clay.	
							17 9		Stopped in clay.
	3	33	9	0	–		0 10	Moory soil.	
							2 2	Yellow clay.	
							2 6	Blue clay.	
							1 0	Turf mud.	
							10 4	Soft blue clay.	
							16 10		Stopped in clay.
	2	34	8	2	–		2 4	Moory soil.	
							3 6	Yellow clay.	
							11 0	Blue clay.	
							16 10		Stopped in clay.
LEITRIM. (See Pl. No. 73.)	Between 13 & 14	1	–		0	8	0 3	Mud.	
							1 6	Loose gravel.	
							4 3	Close gravel and clay.	
							6 0		Stopped in gravel.
		2	–		3	5	2 2	Mud.	
							1 7	Loose gravel.	
							4 7	Close gravel.	
							8 4		Stopped in gravel.
	Near 15	3	0	11	–		1 4	Loose gravel.	
							5 5	Close gravel.	
							6 9		Stopped in gravel.

Leitrim.
(See Pl. No. 73.)

Registry of Details of Borings from Lough Nanogue to Lough Allen—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Appendix B.
Registry of Borings.
Leitrim.
(See Pl. No. 73.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above. Ft. In.	Below. Ft. In.	Depth.	Nature of Soil bored through.	REMARKS.
Leitrim—*Continued.*	Near 15	4	–	3 4	0 8	Mud.	
					1 2	Loose gravel.	
					1 10		Found rock.
	Between 15 & 16	5	–	1 11	3 0	Loose gravel.	Found rock.
		6	7 6	–	1 10	Moory soil.	
					8 11	Mud.	
					1 7	Sand.	
					12 4		Found rock.
	16	7	8 7	–	2 0	Moory soil.	
					2 0	Dark clay.	
					10 1	Mud.	
					0 8	Gravel.	
					14 9		Found rock.
	Between 16–17	8	7 4	–	1 8	Moory soil.	
					11 11	Mud.	
					2 7	Loose gravel.	
					16 2		Found rock.
	Near 17	9	7 10	–	1 6	Moory soil.	
					1 8	Dark clay.	
					8 5	Mud.	
					2 8	Dark mud.	
					1 9	Blue gravel, sand, and clay.	
					0 6	Close gravel.	
					16 6		Found rock.
		10	–	2 11	0 11	Loose gravel.	Found rock.
		11	–	3 11	5 11	Loose gravel.	
					3 6	Close gravel.	
					1 3	Very hard gravel.	
					10 8		Found rock.
		12	–	3 9	0 2	Mud.	
					4 10	Loose gravel.	
					2 7	Close gravel.	
					7 7		Found rock.
		13	–	1 9	2 9	Mud.	
					2 4	Loose gravel.	
					3 9	Close gravel and clay.	
					8 10		Found rock.
		14	7 5	–	1 9	Moory soil.	
					11 0	Mud.	
					3 6	Loose gravel.	
					1 1	Close gravel.	
					17 4		Stopped in close gravel.
	18	15	8 1	–	1 3	Moory soil.	
					3 7	Yellow clay.	
					4 3	Blue mud.	
					4 0	Dark mud.	
					2 2	Loose gravel.	
					2 11	Close gravel.	
					18 2		Stopped in close gravel.
	Near 19	16	6 5	–	11 8	Mud.	
					1 10	Gravel.	
					0 11	Clay.	
					3 6	Gravel.	
					17 11		Stopped in gravel.
	22	17	9 0	–	2 0	Moory soil.	
					3 0	Yellow clay.	
					4 0	Blue mud.	
					3 1	Fine sand.	
					2 9	Loose gravel.	
					1 2	Close gravel.	
					16 0		Found rock.

Appendix B.
Registry of Borings.

Leitrim.
(See Pl. No. 73.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
LEITRIM—*Continued.*	22	18	6 3	–	7 10	Mud.	
					0 7	Gravel.	
					1 7	Clay.	
					7 5	Close gravel.	
					17 5		Stopped in gravel.
	20	19	–	2 8	0 4	Mud.	
					2 7	Loose gravel.	
					2 7	Fine sand.	
					2 6	Hard gravel.	
					8 0		Stopped in gravel.
	20	20	–	0 2	9 1	Loose gravel and sand.	Found rock.
	Between 20 & 21	21	–	1 11	3 3	Loose gravel.	Found rock.
		22	2 9	–	0 4	Gravel.	Found rock.
		23	2 9	–	0 5	Mud.	
					0 4	Gravel.	
					0 9		Found rock.
	Near 21	24	2 4	–	0 11	Mud.	
					0 8	Loose gravel.	
					1 7		Found rock.
	23	25	7 3	–	1 6	Peat.	
					6 10	Mud.	
					8 4		Found rock.
	23	26	–	1 3	1 1	Gravel.	Found rock.
	24	27	–	0 8	1 2	Mud.	
					2 8	Loose gravel.	
					1 1	Close gravel.	
					4 11		Stopped in gravel.
	24	28	–	0 4	1 2	Loose gravel.	Found rock.
	Near 24	29	5 6	–	1 0	Yellow clay.	
					5 7	Blue clay.	
					1 1	Loose gravel.	
					7 8		Found rock.
	Near 24	30	7 7	–	3 10	Dark and yellow clay mixed.	
					1 7	White clay.	
					3 1	Mud.	
					0 7	Gravel.	
					9 1		Found rock.
		31	7 7	–	7 0	Dark clay.	
					1 8	Gravel.	
					8 8		Found rock.
	26	32	–	0 4	2 3	Mud.	
					4 0	Loose gravel.	
					6 3		Found rock.
	26	33	–	3 4	1 8	Loose gravel.	Found rock.
	26	34	–	2 3	0 6	Mud.	
					1 10	Loose gravel.	
					0 4	Close gravel.	
					2 8		Found rock.
	26	35	6 0	–	1 6	Mud.	
					3 8	Soft blue clay.	
					0 10	Turf mould.	
					2 7	Blue clay.	
					1 6	Clay and stones.	
					10 1		Found rock.
	28	36	–	5 0	0 5	Mud.	
					5 2	Clay and gravel.	
					5 7		Stopped in gravel.

Registry of Details of Borings from Lough Nanogue to Lough Allen—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Appendix B.
Registry of Borings.

Leitrim.
(See Pl. No. 73.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Leitrim—*Continued.*	28	37	2 8	–	8 11	Mud.	
					1 4	Loose gravel.	
					1 6	Close gravel.	
					11 9		Found rock.
	Near 29	38	1 6	–	7 8	Mud.	
					0 8	Loose gravel.	
					1 1	Close gravel.	
					10 5		Stopped in gravel.
	29	39	6 3	–	11 0	Mud of various colors.	
					3 6	Stiff clay and stones.	
					14 6		Found rock.
	30	40	–	2 7	2 3	Mud.	
					2 8	Loose gravel.	
					0 11	Close gravel.	
					5 10		Stopped in gravel.
	30	41	–	3 3	0 6	Mud.	
					5 0	Loose gravel.	
					5 6		Stopped in gravel.
	Across point of land between Nos. 10 & 34	42	7 3	–	1 8	Moory soil.	
					17 0	Blue mud.	
					18 8		Stopped in mud.
		43	6 11	–	18 8	Mud.	Stopped in mud.
		44	6 11	–	1 0	Moory soil.	
					2 0	Blue clay.	
					15 8	Blue mud.	
					18 8		Stopped in mud.
		45	7 1	–	1 2	Moory soil.	
					1 0	Blue clay.	
					16 6	Blue mud.	
					18 8		Stopped in mud.
		46	7 4	–	1 6	Moory soil.	
					1 0	Blue clay.	
					16 2	Blue mud.	
					18 8		Stopped in mud.
		47	7 6	–	1 3	Moory soil.	
					2 0	Blue clay.	
					15 5	Blue mud.	
					18 8		Stopped in mud.
		48	7 8	–	1 0	Moory soil.	
					2 4	Blue clay.	
					15 4	Blue mud.	
					18 8		Stopped in mud.
		49	7 10	–	1 2	Moory soil.	
					2 0	Blue clay.	
					13 3	Blue mud.	
					2 1	Gravel.	
					18 6		Stopped in gravel.
		50	8 6	–	1 0	Moory soil.	
					1 6	Yellow clay.	
					2 6	Blue clay.	
					9 7	Blue mud.	
					3 1	Hard gravel.	
					17 8		Stopped in gravel.
	Near 34	51	9 3	–	1 10	Moory soil.	
					6 0	Blue clay.	
					10 3	Blue mud.	
					0 7	Loose gravel.	
					18 8		Stopped in gravel.
	34	52	6 4	–	18 8	Mud.	Found rock.

Appendix B.
Registry of Borings.
Leitrim.
(See Pl. No. 73.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
LEITRIM—*Continued.*	33	53	7 6	–	1 6	Moory soil.	
					17 2	Blue mud.	
					18 8		Stopped in blue mud.
	34	54	7 10	–	0 10	Moory soil.	
					17 10	Mud.	
					18 8		Stopped in mud.
	37	55	8 10	–	2 0	Moory soil.	
					3 0	Yellow clay.	
					13 8	Blue mud.	
					18 8		Stopped in mud.
	Between 37 & 38	56	9 2	–	2 2	Moory soil.	
					2 4	Yellow clay.	
					14 2	Mud.	
					18 8		Stopped in mud.
	38	57	7 9	–	1 6	Moory soil.	
					2 2	Yellow clay.	
					1 0	Blue clay.	
					14 0	Mud.	
					18 8		Stopped in mud.
	Near 40	58	6 6	–	18 8	Mud.	Stopped in mud.
	Near 38	59	7 6	–	18 8	Mud.	Stopped in mud.
	Between 38 & 39	60	8 1	–	2 0	Moory soil.	
					2 2	Yellow clay.	
					0 4	Blue clay.	
					1 7	Yellow clay.	
					12 7	Blue mud.	
					18 8		Stopped in mud.
		61	8 6	–	3 0	Moory soil.	
					11 4	Blue mud.	
					0 4	Fine sand.	
					4 0	Blue clay.	
					18 8		Stopped in clay.
	Near 42	62	8 3	–	2 0	Moory soil.	
					16 8	Blue mud.	
					18 8		Stopped in mud.
	44½	63	0 4	–	8 2	Mud.	
					2 0	Loose gravel.	
					2 5	Close clay and gravel.	
					0 6	Strong clay and gravel.	
					13 1		Stopped in clay and gravel.
	44½	64	–	1 9	0 4	Sand.	
					2 4	Loose gravel.	
					2 11	Clay and gravel.	
					5 7		Stopped in gravel.
	Between 46 & 47	65	–	5 9	2 11	Loose gravel.	
					1 11	Close gravel.	
					4 10		Stopped in gravel.
	Between 46 & 47	66	7 2	–	6 6	Peat.	
					1 8	Sand.	
					2 0	Gravel.	
					3 8	Clay.	
					13 10		Found rock.
	Near 48	67	7 8	–	4 6	Mud.	
					0 6	Sand.	
					12 0	Strong clay.	
					17 0		Found rock.
	Near 48	68	0 1	–	7 10	Close gravel and stones.	Stopped in gravel and stones.
	48	69	1 1	–	7 2	Close gravel and clay.	Stopped in gravel and clay.

Appendix B.
Registry of Borings.
Leitrim.
(See. Pl. No. 73.)

Registry of Details of Borings from Lough Nanogue to Lough Allen—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Leitrim—(*Continued.*)	Near 50	70	0 3	–	2 7	Loose gravel.	
					3 1	Strong gravel and clay.	
					5 8		Stopped in gravel.
	48	71	6 4	–	4 5	Mud.	
					1 6	Loose gravel.	
					8 1	Clay, gravel, and stones.	
					14 0		Stopped in gravel and stones.
	Near 52	72	6 3	–	7 5	Mud.	
					2 4	Loose gravel.	
					4 9	Clay and stones.	
					14 6		Stopped in clay and stones.
	51	73	0 3	–	3 1	Loose gravel.	
					0 9	Gravel and clay.	
					1 8	Close gravel and clay.	
					5 6		Stopped by a stone.
	51	74	–	3 0	3 0	Loose gravel.	There are a great many large stones in this part of the river, both above and below the surface.
					1 9	Clay and gravel.	
					4 9		Stopped in clay and gravel.
	53	75	7 0	–	2 6	Dark soil.	
					5 8	Yellow clay.	
					10 6	Peat, and blue clay.	
					18 8		Stopped in peat, and blue clay.
	Near 59	76	6 6	–	2 9	Yellow clay.	
					5 7	Blue clay.	
					0 8	Peat.	
					5 10	Clay mixed with peat.	
					3 10	Clay and stones.	
					18 8		Stopped in clay and stones.
	Near 59	77	6 5	–	17 9	Mud.	
					0 11	Strong clay.	
					18 8		Stopped in clay.
	Across point of land between Nos. 59 & 74.	78	8 10	–	2 0	Soil.	
					1 3	Yellow clay.	
					15 5	Blue clay.	
					18 8		Stopped in blue clay.
		79	9 7	–	1 6	Soil.	
					4 0	Yellow clay.	
					13 2	Blue clay.	
					18 8		Stopped in clay.
		80	9 10	–	0 8	Soil.	
					3 4	Yellow clay.	
					14 8	Blue clay.	
					18 8		Stopped in clay.
		81	9 9	–	1 9	Soil.	
					1 6	Yellow clay.	
					15 5	Blue clay.	
					18 8		Stopped in clay.
		82	7 0	–	2 1	Moory soil.	
					0 4	Yellow clay.	
					16 3	Soft blue clay.	
					18 8		Stopped in clay.
	61	83	–	3 1	1 1	Mud.	
					2 5	Loose gravel.	
					1 4	Close gravel.	
					4 10		Stopped in close gravel.
	61	84	–	0 2	5 0	Loose gravel.	
					1 9	Clay, stones, and gravel.	
					6 9		Stopped by a stone.

Appendix B.
Registry of Borings.

Leitrim.
(See Pl. No. 73.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
LEITRIM—(*Continued.*)	Between 61 & 62	85	7 11	–	2 11	Yellow clay.	
					1 4	Blue clay.	
					2 11	Turf mould.	
					7 6	Blue clay.	
					14 8		Stopped in clay.
	62	86	0 10	–	6 4	Loose gravel.	
					0 9	Close gravel and clay.	
					7 1		Stopped in gravel.
	2	87	2 0	–	1 11	Loose gravel.	
					3 10	Hard gravel.	
					5 9		Found rock.
	Near 63	88	7 1	–	2 8	Peat.	
					8 10	Mud.	
					1 0	Close gravel.	
					2 10	Clay and stones.	
					15 4		Found rock.
		89	–	0 9	0 11	Mud.	
					3 4	Sand and stones.	
					0 8	Strong gravel.	
					4 11		Found rock.
		90	1 5	–	3 7	Loose gravel.	
					0 10	Hard gravel.	
					4 5		Found rock.
		91	1 10	–	2 4	Strong gravel.	
					0 2	Stiff clay.	
					2 6		Found rock.
		92	2 2	–	0 8	Loose gravel.	
					3 8	Very hard gravel.	
					4 4		Stopped by a stone.
	Near 64	93	1 9	–	0 9	Loose gravel.	
					1 4	Hard gravel.	
					1 2	Loose gravel.	
					2 8	Strong gravel.	
					5 11		Found rock.
		94	1 7	–	1 3	Loose gravel.	
					0 10	Close gravel and clay.	
					1 8	Hard gravel.	
					0 4	Clay and gravel.	
					4 1		Found rock.
	65	95	–	1 2	2 8	Loose gravel.	
					0 8	Hard gravel.	
					3 4		Stopped in gravel.
	65	96	–	1 3	2 10	Mud.	
					2 1	Loose gravel.	
					0 2	Clay and gravel.	
					5 1		Found rock.
	Between 65 & 66	97	8 1	–	2 0	Moory soil.	
					6 4	Mud.	
					2 6	Blue clay.	
					1 7	Mud.	
					1 1	Sand.	
					1 6	Mud.	
					0 6	Clay.	
					15 6		Stopped by a stone.
	65	98	9 7	–	2 5	Soil.	
					2 1	Yellow clay.	
					12 8	Blue clay.	
					1 6	Clay and stones.	
					18 8		Stopped in clay and stones.

Appendix B.
Registry of Borings.

Leitrim.
(See Pl. No. 73.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
LEITRIM—*Continued.*	Near 70	99	8 1	–	0 10	Soil.	
					4 4	Yellow clay.	
					5 0	Blue clay.	
					5 9	Fine sand.	
					2 9	Blue clay.	
					18 8		Stopped in blue clay.
	83	100	0 6	–	16 4	Mud and gravel.	Stopped in mud.
	83	101	0 10	–	0 7	Loose gravel.	
					17 1	Mud and gravel.	
					17 8		Stopped in mud.
BATTLE BRIDGE. (See Pl. No. 75.)	85	1	–	1 6	9 4	Mud and gravel.	
					0 10	Close gravel and clay.	
					10 2		Stopped in gravel and clay.
	85	2	–	1 4	1 4	Mud and gravel.	
					3 2	Loose gravel.	
					10 11	Mud and gravel.	
					15 5		Stopped in mud and gravel.
	86	3	–	0 11	4 4	Loose gravel.	
					1 8	Close gravel.	
					6 0		Stopped in gravel.
	87	4	–	0 4	1 3	Loose gravel.	
					3 2	Strong gravel and clay.	
					4 5		Stopped in gravel.
	87	5	–	0 4	1 9	Loose gravel.	
					0 4	Mud.	
					2 2	Clay and gravel.	
					4 3		Stopped by large stone or rock.
	87	6	8 4	–	2 9	Peaty clay soil.	
					1 0	Yellow clay.	
					2 6	Soft dark clay.	
					0 4	Loose gravel.	
					8 1	Soft blue clay.	
					1 2	Loose gravel and clay.	
					0 8	Fine close gravel.	
					16 6		Stopped in gravel.
	87	7	10 0	–	1 6	Peaty clay soil.	
					5 10	Light blue clay.	
					0 4	Coarse gravel.	
					6 1	Stiff blue clay.	
					3 1	Stiff clay and gravel.	
					16 10		Stopped in gravel.
	Near 88	8	9 3	–	3 0	Yellow clay.	
					5 3	Blue clay.	
					0 5	Loose gravel.	
					8 2	Blue clay.	
					16 10		Stopped in clay.
	89	9	–	0 3	0 4	Gravel.	
					2 0	Mud.	
					1 0	Mud and gravel.	
					1 2	Soft clay and gravel.	
					4 6		Stopped in gravel.
	89	10	1 3	–	8 8	Mud.	
					2 2	Soft clay and gravel.	
					0 5	Stiff clay and gravel.	
					11 3		Stopped in gravel.
	89	11	9 6	–	1 1	Peaty clay soil.	
					1 0	Yellow clay.	
					14 9	Blue clay.	
					16 10		Stopped in blue clay.

Battle Bridge.
(See Pl. No. 75.)

Appendix B.
Registry of Borings.

Battle Bridge.
(See Pl. No. 75.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
BATTLE BRIDGE, *Continued.*	90	12	0 0	0 0	0 10	Loose gravel.	
					6 9	Mud and gravel.	
					1 2	Stiff clay, gravel, and stones.	
					8 9		Stopped in clay and gravel.
	91	13	9 8	–	0 11	Peaty clay soil.	
					2 4	Yellow clay.	
					2 1	Blue clay.	
					0 3	Loose gravel.	
					7 0	Soft blue clay.	
					4 3	Stiff clay and gravel.	
					16 10		Stopped in clay and gravel.
	92	14	1 3	–	4 3	Loose gravel.	Stopped by rock or large stone.
	92	15	0 0	0 0	1 5	Mud.	
					4 5	Loose gravel.	
					0 5	Hard gravel.	
					6 3		Stopped in gravel.
	93	16	9 9	–	0 4	Peaty clay soil.	
					0 11	Yellow clay.	
					1 11	Blue clay.	
					1 7	Fine loose gravel.	
					2 7	Mud and gravel.	
					4 6	Blue clay.	
					3 8	Loose gravel and clay.	
					1 4	Stiff clay and gravel.	
					16 10		Stopped in gravel.
	93	17	10 5	–	1 2	Peaty clay soil.	
					2 6	Stiff blue clay.	
					0 4	Loose gravel.	
					3 8	Soft blue clay.	
					3 7	Stiff blue clay and gravel.	
					1 0	Strong gravel and clay.	
					12 3		Stopped by rock or large stone.
	94	18	0 6	–	3 6	Loose gravel.	
					2 2	Close gravel.	
					5 8		Stopped by rock or large stone.
	94	19	0 10	–	3 3	Loose gravel.	
					1 9	Hard gravel.	
					5 0		Stopped in gravel.
	94	20	2 2	–	2 8	Loose gravel.	
					1 7	Hard gravel.	
					4 3		Stopped by rock or large stone.
	Between 94 & 1	21	9 9	–	1 0	Peaty clay soil.	
					0 10	Yellow clay.	
					2 6	Soft blue clay.	
					0 6	Soft clay and gravel.	
					4 2	Stiff blue clay.	
					0 7	Clay and gravel.	
					9 7		Stopped by rock or large stone.
	Between 1 and 2.	22	2 6	–	3 0	Loose gravel.	
					0 7	Strong gravel.	
					3 7		Stopped by a stone.
		23	2 8	–	3 7	Loose gravel.	
					1 7	Strong gravel and clay.	
					5 2		Stopped by a rock or large stone.
		24	2 10	–	1 0	Loose gravel.	
					1 11	Sand and mud.	
					6 3	Clay and gravel.	
					0 7	Clay and gravel.	
					9 9		Stopped by a rock or large stone.
		25	10 6	–	1 3	Peaty clay soil.	
					4 5	Stiff blue clay.	
					5 1	Gravel and soft clay.	
					3 3	Stiff clay and gravel.	
					14 0		Stopped by rock.

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Appendix B.
Registry of Borings.

Battle Bridge.
(See Pl. No. 75.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above. Ft. In.	Below. Ft. In.	Depth. Ft. In.	Nature of Soil bored through.	REMARKS.
BATTLEBRIDGE, *Continued.*	Between 1 & 2	26	12 3	–	0 7	Peaty clay soil.	
					1 4	Loose gravel.	
					1 3	Stiff yellow clay.	
					1 9	Blue clay.	
					2 0	Stiff clay and gravel.	
					6 11		Stopped by rock or large stone.
	Near 3	27	4 9	–	1 2	Loose gravel.	
					3 5	Stiff clay and gravel.	
					4 7		Stopped by a stone.
	Between 3 & 4	28	5 0	–	1 0	Loose gravel.	
					5 3	Clay and gravel.	
					6 3		Stopped in gravel.
	Near 5	29	4 6	–	0 10	Mud.	
					4 1	Stiff clay and gravel.	
					4 11		Stopped by a stone.
	Near 5	30	7 4	–	2 2	Mud.	
					7 5	Close gravel and clay.	
					9 7		Stopped by rock or stone.
	Near 6	31	5 4	–	1 0	Loose gravel.	
					2 0	Close gravel and stones.	
					3 0		Stopped by a stone.
	7	32	6 3	–	1 0	Alluvial clay.	
					4 8	Stiff clay and stones.	
					5 8		Stopped by rock or large stone.
	Between 8 and 9	33	7 6	–	1 0	Soil.	
					4 7	Stiff clay.	
					5 7		Stopped by rock or stone.
	Between 8 and 9	34	7 6	–	5 9	Stiff clay and gravel.	Stopped by rock or stone.
	Between 8 and 9	35	7 6	–	1 1	Alluvial clay.	
					5 2	Clay and gravel.	
					6 3		Found rock.
	Near 10	36	9 0	–	1 2	Alluvial clay.	
					9 10	Stiff clay.	
					10 0		Stopped in clay.
	Between 10 & 11	37	9 0	–	1 0	Alluvial clay.	
					4 6	Stiff clay and stones.	
					5 6		Stopped by a stone.
BEALANTRA. (See Pl. No. 82.)	Near 3	1	27 6	–	2 0	Peaty clay soil.	
					14 8	Soft clay.	
					16 8		Stopped in clay.
	4	2	26 0	–	2 10	Alluvial clay.	
					7 10	Gravel and stiff clay.	
					10 8		Stopped in clay.
	5	3	28 4	–	2 0	Peaty clay soil.	
					12 0	Soft clay.	
					1 2	Stiff clay.	
					15 2		Stopped in clay.
	6	4	28 8	–	1 8	Peaty clay soil.	
					4 0	Soft clay.	
					5 7	Stiff clay.	
					11 3		Stopped by a stone.
	8	5	29 0	–	10 0	Soft clay and gravel.	
					1 7	Stiff clay and gravel.	
					11 7		Stopped in clay and gravel.

Bealantra.
(See Pl. No. 82.)

Appendix B.
Registry of Borings.

Bealantra.
(See Pl. No. 82.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
BEALANTRA—*Continued.*	8	6	28 3	–	9 1	Close gravel and clay.	Stopped in strong clay.
	9	7	29 9	–	1 8	Peaty clay soil.	
					9 2	Soft clay.	
					1 9	Stiff clay and gravel.	
					1 4	Stiff clay, stones, and gravel.	
					13 11		Stopped in gravel.
	9	8	28 0	–	0 7	Peaty clay soil.	
					1 7	Soft clay and gravel.	
					3 0	Stiff clay and gravel.	
					1 3	Stiff clay, stones, and gravel.	
					6 5		Stopped by a stone.
	10	9	29 9	–	2 4	Peaty clay soil.	
					16 5	Soft clay and gravel.	
					3 9	Very stiff clay and gravel.	
					22 6		Stopped in clay and gravel.
	10	10	29 6	–	3 0	Peaty clay soil.	
					6 9	Soft clay and fine gravel.	
					0 7	Stiff clay.	
					3 7	Stiff clay and gravel.	
					13 11		Stopped in clay and gravel.
	10	11	29 4	–	6 8	Stiff clay and gravel.	Stopped in clay and gravel.
	Near 10	12	25 6	–	5 0	Very loose gravel.	
					2 6	Stiff clay and gravel.	
					2 8	Very stiff clay and gravel.	
					10 2		Stopped in stiff clay.
	Near 12	13	25 6	–	13 5	Soft clay and fine gravel.	
					9 0	Stiff clay.	
					22 5		Stopped in stiff clay.
	12	14	29 0	–	3 0	Peaty clay soil.	
					1 6	Soft clay.	
					18 1	Stiff clay.	
					22 7		Stopped in stiff clay.
	Between 10 & 11	15	26 0	–	20 7	Loose clay and gravel.	
					2 0	Stiff clay and fine gravel.	
					22 7		Stopped in clay and gravel.
	Near 11	16	27 6	–	1 2	Peaty clay soil.	
					3 6	Stiff clay and gravel.	
					17 10	Soft clay and gravel.	
					22 6		Stopped in clay and gravel.
	Between 11 & 13	17	26 6	–	3 0	Very loose gravel.	
					7 8	Loose gravel, clay, and stones.	
					10 8		Stopped in clay.
		18	27 0	–	0 10	Peaty clay soil.	
					2 10	Stiff clay and gravel.	
					2 0	Stiff clay and stones.	
					5 8		Stopped by a large stone.
	Near 13	19	27 6	–	2 9	Soft clay.	
					3 8	Soft clay and gravel.	
					3 5	Stiff clay, stones, and gravel.	
					9 10		Stopped by a stone.
	14	20	27 0	–	22 0	Alluvial clay.	Stopped in clay.
ARIGNA RIVER. CUT AT MOUNT ALLEN. (See Pl. No. 84.)	13	1	28 0	–	13 10	Peat.	
					4 11	Blue clay.	
					18 9		Stopped in blue clay.

ARIGNA RIVER.
Cut at
Mount Allen.
(See Pl. No. 84.)

Appendix B.
Registry of Borings.

Arigna River.
Cut at
Mount Allen.
(See Pl. No. 84.)

Registry of Details of Borings from Lough Nanogue to Lough Allen—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Arigna River. Cut at Mount Allen. *Continued.*	Near 12	2	28 0	–	16 8	Peat.	
					2 1	Blue clay.	
					18 9		Stopped in blue clay.
	Near 11	3	31 0	–	15 9	Peat.	
					3 0	Blue clay.	
					18 9		Stopped in blue clay.
	Between 11 & 10	4	33 0	–	18 6	Peat.	
					0 3	Blue clay.	
					18 9		Stopped in blue clay.
	Between 9 & 10	5	34 0	–	12 2	Peat.	
					6 7	Very stiff blue clay.	
					18 9		Stopped in blue clay.
	Between 8 & 9	6	34 0	–	6 8	Peat.	
					12 1	Blue clay.	
					18 9		Stopped in blue clay.
		7	35 0	–	18 9	Blue clay.	Stopped in blue clay.
	Between 7 & 8	8	35 0	–	9 0	Alluvial clay.	
					8 0	Blue clay.	
					17 0		Stopped in blue clay.
		9	35 0	–	3 0	Soil.	
					14 0	Very stiff blue clay.	
					17 0		Stopped in blue clay.
		10	36 6	–	17 0	Blue clay.	Stopped in blue clay.
	Near 7	11	35 0	–	3 1	Alluvial clay.	
					0 8	Gravel.	
					13 3	Blue clay.	
					17 0		Stopped in blue clay.
	Between 6 & 7	12	34 0	–	5 3	Alluvial clay.	
					11 9	Mixture of clays deposited by the floods.	
					17 0		Stopped in clay.
	Near 3	13	34 0	–	2 9	Alluvial clay.	
					1 10	Dark blue mud.	
					8 11	Mixture of clays of different colors.	
					3 6	Blue clay.	
					17 0		Stopped in blue clay.
Drumshanbo. (See Pl. No. 81.)	2	1	28 4	–	2 7	Peaty clay soil.	
					3 7	Stiff clay and gravel.	
					6 2		Stopped in clay and gravel.
	1	2	28 0	–	1 2	Peaty clay soil.	
					5 6	Dark soft clay.	
					2 0	Soft blue clay.	
					6 3	Stiff clay and fine gravel.	
					14 11		Stopped in clay and gravel.
	1	3	27 9	–	8 0	Alluvial clay.	
					3 8	Stiff clay.	
					1 6	Stiff clay and gravel.	
					13 2		Stopped in clay and gravel.
	1	4	28 4	–	6 11	Alluvial clay.	
					0 6	Loose fine gravel.	
					1 6	Stiff clay.	
					1 3	Stiff clay and gravel.	
					10 2		Stopped in clay and gravel.
	–	5	24 1	–	6 6	Mud.	In Lough Allen.
					4 10	Soft clay and gravel.	
					2 3	Stiff clay and gravel.	
					13 7		Stopped in clay.

Drumshanbo.
(See Pl. No. 81.)

Appendix B.
Registry of Borings.

Drumshanbo.
(See Pl. No. 81.)

REGISTRY of Details of BORINGS from LOUGH NANOUGE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above. Ft. In.	Below. Ft. In.	Depth. Ft. In.	Nature of Soil bored through.	REMARKS.
DRUMSHANBO—*Continued.*	–	6	24 0	–	14 5	Stiff mud.	In Lough Allen.
					0 8	Strong clay and gravel.	
					15 1		Stopped in clay.
	North of 1	7	27 6	–	18 7	Alluvial clay.	
					1 4	Stiff clay.	
					1 0	Stiff clay and gravel.	
					20 11		Stopped in clay and stones.
	North of 1	8	28 1	–	8 0	Alluvial clay.	
					2 6	Soft clay.	
					0 4	Gravel and clay.	
					4 7	Stiff clay.	
					1 8	Stiff clay and gravel.	
					17 1		Stopped in clay and stones.
	–	9	21 3	–	4 1	Mud.	
					5 7	Stiff clay and gravel.	
					4 2	Soft clay.	
					3 0	Stiff clay.	
					16 10		Stopped in clay. (In Lough Allen.)
	–	10	24 3	–	9 4	Mud.	
					10 4	Soft clay.	
					19 8		Stopped in clay. (In Lough Allen.)
	North of 1	11	27 9	–	13 2	Alluvial clay.	
					10 5	Soft clay.	
					23 7		Stopped in clay.
		12	23 5	–	0 5	Loose gravel.	In Lough Allen.
					9 5	Mud.	
					9 0	Soft clay.	
					18 10		Stopped in clay.
The CALLOWS of ATTIRORY & ATTIFINLAN. (See Pl. No. 53.)	On Section of Callows of Cordrehid, Attirory, and Attifinlan.	1	5 4	–	3 0	Stiff clay, stones, and gravel.	
					2 4	Stiff clay, and some gravel.	
					6 4		Stopped in clay.
		2	–	6 0	1 0	Mud.	
					2 2	Soft clay and gravel.	
					3 2		Found rock.
		3	–	2 0	6 5	Mud.	
					1 11	Stiff clay and gravel.	
					8 4		Stopped in gravel.
		4	3 3	–	12 7	Mud.	Found rock.
		5	5 3	–	13 8	Peat.	
					8 6	Blue mud.	
					22 2		Found rock.
		6	7 6	–	13 0	Peat.	
					9 10	Blue mud.	
					22 10		Found rock.
		7	6 0	–	16 2	Peat.	
					9 4	Blue mud.	
					25 6		Found rock.
		8	7 9	–	6 6	Peat.	
					2 3	Soft blue clay.	
					3 9	Stiff clay and gravel.	
					12 6		Stopped in clay.
The CALLOWS of CLOONSKEVIN, and the TOWN-PARKS of CARRICK-ON-SHANNON. (See Pl. No. 53.)	–	1	12 3	–	1 1	Soil.	
					1 11	Yellow clay and some gravel.	
					1 6	Brown clay and gravel.	
					1 0	Stiff clay, gravel, and stones.	
					5 6		Stopped in clay and gravel.

Attirory and Attifinlan.
(See Pl. No. 53.)

Cloonskevin, and the Townparks of Carrick-on-Shannon.
(See Pl. No. 53.)

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Appendix B.
Registry of Borings.

Cloonskevin and the Townparks of Carrick-on-Shannon. (See Pl. No. 53.)

REGISTRY of Details of BORINGS from LOUGH NANOGUE to LOUGH ALLEN—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
The CALLOWS of CLOONSKEVIN, and the TOWNPARKS of CARRICK-ON-SHANNON—*Continued.*	On section of Callows of Cloonskevin and Townparks of Carrick-on-Shannon.	2	7 3	–	0 9	Peaty clay soil.	
					6 1	Peat.	
					2 7	Blue mud.	
					4 1	Stiff clay and gravel.	
					13 6		Stopped in clay and gravel.
		3	7 0	–	1 2	Peaty clay soil.	
					12 10	Peat.	
					13 5	Blue mud.	
					27 5		Found gravel.
		4	5 9	–	2 0	Peaty clay soil.	
					8 11	Peat.	
					17 5	Blue mud.	
					28 4		Stopped in blue mud.
		5	4 6	–	4 3	Peaty clay soil.	
					0 3	Peat.	
					19 3	Dark mud.	
					23 9		Found loose gravel.
		6	2 0	–	20 4	Mud.	
					1 5	Stiff clay and gravel.	
					21 9		Found rock.
		7	–	5 7	10 9	Mud.	Found rock.
		8	0 3	–	10 7	Mud.	
					7 2	Mud and some gravel.	
					0 3	Clay and gravel.	
					18 0		Found rock.
		9	5 9	–	8 1	Peaty mud.	
					4 10	Blue mud.	
					12 11		Found loose gravel.
		10	8 0	–	8 3	Peat.	
					3 3	Dark mud.	
					4 8	Blue mud.	
					16 2		Found loose gravel.
		11	8 9	–	18 0	Peat.	
					4 8	Blue mud.	
					22 8		Stopped in blue mud.
		12	10 0	–	2 0	Peaty clay soil.	
					9 7	Peat.	
					3 5	Soft blue clay.	
					15 0		Found loose gravel.
The CALLOWS of CLAYHEEN & CORRYOLUS. (See Pl. No. 53.)	On section of Callows of Clayheen and Corryolus.	1	7 6	–	9 10	Peat.	
					0 2	Blue mud.	
					10 0		Found gravel.
		2	7 0	–	9 0	Peaty mud.	
					3 4	Dark mud.	
					5 5	Blue mud.	
					17 9		Found gravel.
		3	5 8	–	0 5	Peaty clay soil.	
					4 10	Peat.	
					6 3	Dark mud.	
					3 6	Blue mud.	
					15 0		Found gravel.
		4	5 9	–	1 8	Peaty clay soil.	
					4 6	Peat.	
					8 10	Dark mud.	
					5 9	Blue mud.	
					20 9		Found gravel.

Clayheen and Corryolus. (See Pl. No. 53.)

Appendix B.
Registry of Borings.

Clayheen and Corryolus.
(See Pl. No. 53.)

Registry of Details of Borings from Lough Nanogue to Lough Allen—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
The Callows of Clayheen and Corryolus—*Continued.*	On section of Callows of Clayheen and Corryolus.	5	1 0	–	9 8	Mud.	
					3 4	Strong clay and gravel.	
					13 0		Stopped in strong gravel.
		6	–	4 2	8 6	Mud.	
					0 6	Loose gravel.	
					9 0		Stopped in strong gravel.
		7	0 11	–	13 7	Mud.	
					0 9	Loose gravel.	
					14 4		Found rock.
		8	5 0	–	5 11	Peat.	
					11 1	Dark mud.	
					3 10	Blue mud.	
					20 10		Found gravel.
		9	6 0	–	3 3	Peaty clay and gravel.	
					2 10	Blue mud.	
					6 1		Found gravel.
		10	6 0	–	1 8	Peaty clay soil.	
					0 6	Peat.	
					2 2		Found gravel.
		11	6 6	–	0 3	Peaty clay soil.	
					2 4	Fine gravel and clay.	
					2 7		Stopped in clay and gravel.

The Boyle Water.

Tumna and Clayheen.
(See Pl. No. 93.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Tumna and Clayheen. (See Pl. No. 93.)	Near 3	1	1 8	–	19 0	Mud and some marl.	Stopped in mud.
	Between 4 & 5	2	1 8	–	19 0	Mud.	Stopped in mud.
	Near 6	3	0 7	–	13 7	Mud.	
					1 0	Loose gravel.	
					14 7		Stopped in gravel.
	Near 8	4	0 9	–	1 10	Marl.	
					2 11	Loose gravel.	
					2 0	Close gravel and clay.	
					6 9		Stopped in gravel and clay.
	11	5	1 0	–	4 6	Loose gravel.	
					2 3	Close gravel and clay.	
					6 9		Stopped in clay and gravel.
	11	6	–	0 8	1 7	Marl.	
					2 0	Coarse sand.	
					2 1	Loose gravel.	
					5 8		Found gravel.
	11	7	–	2 0	0 2	Mud.	
					3 2	Loose gravel and clay.	
					3 4		Found strong gravel.
	11	8	–	0 9	1 5	Loose gravel.	Found rock.
	Between 12 & 13	9	0 0	0 0	4 1	Clay and gravel.	Stopped in clay and gravel.
		10	–	0 1	2 5	Loose gravel.	
					1 5	Gravel and clay.	
					3 10		Stopped by a stone.

Tumna and Clayheen. (See Pl. No. 93.)

Annalecky and the Doctor's Weir. (See Pl. No. 94.)

Registry of Details of Borings.—The Boyle Water—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Tumna and Clayheen—*Continued.*	Near 14	11	–	1 0	1 10	Marl.	
					1 7	Soft clay and gravel.	
					1 2	Close gravel and clay.	
					4 7		Stopped in clay and gravel.
		12	–	3 3	1 5	Loose gravel.	
					1 9	Close gravel and clay.	
					3 2		Stopped in gravel and clay.
		13	2 5	–	0 10	Loose gravel.	
					3 9	Strong gravel.	
					4 7		Stopped in gravel.
	Near 15	14	–	1 3	3 9	Loose gravel.	
					0 4	Close gravel and clay.	
					4 1		Stopped in gravel and clay.
	Near 18	15	1 6	–	1 3	Loose gravel.	
					3 3	Clay and gravel.	
					1 0	Stiff clay and gravel.	
					1 4	Soft clay.	
					6 10		Stopped in stiff clay.
	Near 20	16	–	1 0	0 5	Sand and mud.	
					4 9	Loose gravel.	
					5 2		Stopped by rock or large stone.
	Near 19	17	0 0	0 0	2 0	Soft clay and gravel.	
					3 7	Stiff clay and gravel.	
					5 7		Stopped in clay and gravel.
	Between 17 &18	18	1 8	–	0 8	Loose gravel.	
					1 0	Coarse sand.	
					4 0	Close gravel and clay.	
					5 8		Stopped in clay and gravel.
Annalecky and the Doctor's Weir. (See Pl. No. 94.)	3	1	2 0	–	3 7	Soft clay and gravel.	
					0 4	Stones.	
					0 10	Strong gravel.	
					4 9		Stopped in gravel.
	Between 3 & 4	2	0 7	–	2 2	Loose sand and gravel.	
					2 8	Stiff clay and gravel.	
					4 10		Stopped in clay and gravel.
	Near 4	3	2 9	–	2 6	Soft clay and gravel.	
					3 9	Stiff clay and gravel.	
					6 3		Stopped in clay and gravel.
	5	4	1 8	–	2 4	Soft clay and gravel.	
					3 0	Stiff clay and gravel.	
					5 4		Stopped in clay and gravel.
	5	5	1 8	–	2 3	Soft clay and gravel.	
					4 1	Stiff clay and gravel.	
					6 4		Stopped in clay and gravel.
	Near 6	6	1 8	–	2 10	Soft clay and gravel.	
					2 3	Stiff clay and gravel.	
					5 1		Stopped in stiff clay and gravel.
	14	7	0 11	–	7 0	Mud and gravel.	Found rock.
	14	8	2 5	–	0 10	Mud.	
					7 2	Coarse gravel.	
					8 0		Found rock.
	15	9	1 11	–	3 0	Soft clay and gravel.	
					2 8	Stiff clay and gravel.	
					5 8		Stopped in stiff clay.

Appendix B.
Registry of Borings.

Annalecky and the Doctor's Weir.
(See Pl. No. 94.)

Registry of Details of Borings.—The Boyle Water—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Annalecky and the Doctor's Weir, *Continued.*	15	10	1 5	–	2 6	Gravel and clay.	Found rock.
	15	11	3 7	–	0 10	Mud.	
					7 1	Soft mud and gravel.	
					7 11		Found rock.
	15	12	2 5	–	3 9	Mud.	
					0 9	Loose gravel.	
					4 6		Found rock.
	15	13	0 5	–	2 6	Loose sand and gravel.	Found rock.
	15	14	0 4	–	0 11	Loose gravel.	Found rock.
	Near 16	15	2 2	–	2 2	Stiff clay and gravel.	Found rock.
	17	16	4 6	–	5 5	Stiff clay and gravel.	Found rock.
	Near 17	17	2 7	–	0 10	Loose gravel.	
					2 2	Clay and gravel.	
					3 0		Found rock.
	20	18	4 4	–	1 0	Clay and stones.	
					1 4	Soft clay.	
					1 11	Stiff clay and gravel.	
					4 3		Found rock.
	Near 19	19	2 2	–	1 6	Loose gravel.	Found rock.
	19	20	1 4	–	1 2	Loose gravel.	Found rock.
	19	21	1 7	–	1 11	Clay and gravel.	Found rock.
	20	22	2 4	–	1 7	Clay and gravel.	Found rock.
	Between 20 & 21	23	1 5	–	2 0	Soft clay and gravel.	
					1 8	Stiff clay and gravel.	
					3 8		Found rock.
	21	24	2 6	–	2 3	Soft clay and gravel.	
					1 8	Stiff clay and gravel.	
					3 11		Found rock.
	21	25	1 4	–	2 10	Soft clay and gravel.	
					3 0	Stiff clay and gravel.	
					5 10		Stopped in clay and gravel.
	21	26	0 8	–	1 8	Soft clay and gravel.	
					3 5	Stiff clay and gravel.	
					5 1		Stopped in clay and gravel.
	Near 22	27	–	0 1	2 10	Clay and gravel.	Found rock.
	22	28	0 10	–	2 0	Clay and gravel.	Found rock.
	22	29	–	0 9	1 0	Soft clay and gravel.	Found rock.
	23	30	0 3	–	2 9	Soft clay and gravel.	
					1 0	Stiff clay and gravel.	
					3 9		Found rock.
	23	31	–	1 5	1 4	Soft clay and gravel.	Found rock.
	21	32	5 0	–	0 11	Mud.	
					3 11	Mud and gravel.	
					1 10	Clay and gravel.	
					0 7	Stiff clay and gravel.	
					7 3		Found rock.
	22	33	5 0	–	1 11	Mud.	
					3 0	Mud and gravel.	
					0 6	Clay and gravel.	
					5 5		Stopped by rock or large stone.

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level: Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
ANNALECKY and the DOCTOR'S WEIR, *Continued.*	24	34	5 6	–	3 10	Alluvial clay.	
					1 0	Soft clay and gravel.	
					5 2	Stiff clay and gravel.	
					10 0		Stopped in clay and gravel.
	24	35	–	0 8	2 1	Clay and gravel.	Found rock.
	24	36	–	1 6	1 1	Mud and gravel.	
					0 4	Gravel.	
					1 5		Found rock.
	25	37	1 2	–	2 1	Clay and gravel.	Found rock.
	25	38	–	0 8	2 2	Soft clay and gravel.	
					0 6	Stiff clay and gravel.	
					2 8		Found rock.
	26	39	5 5	–	3 0	Mud.	
					1 11	Soft clay and gravel.	
					4 3	Stiff clay, stones, & gravel.	
					9 2		Stopped by rock or large stone.
	26	40	0 5	–	1 4	Loose gravel.	
					0 5	Stiff gravel.	
					1 9		Found rock.
	28	41	5 8	–	1 11	Alluvial clay.	
					2 10	Soft clay and gravel.	
					3 3	Stiff clay, stones, and gravel.	
					8 0		Stopped by rock or large stone.
	28	42	0 9	–	0 6	Mud and gravel.	
					1 5	Soft clay and gravel.	
					0 11	Loose gravel.	
					2 10		Found rock.
	Between 27 & 28	43	0 10	–	1 9	Clay and gravel.	Found rock.
	28	44	0 7	–	0 8	Mud.	
					1 5	Soft clay and gravel.	
					2 3	Stiff clay and gravel.	
					4 4		Found rock.
	29	45	–	0 9	1 11	Loose gravel.	
					2 1	Clay and gravel.	
					4 0		Found rock.
	29	46	–	1 8	0 6	Mud.	
					1 0	Loose gravel.	
					1 6		Found rock.
	Near 31	47	6 6	–	3 7	Alluvial clay.	
					3 1	Marl.	
					2 11	Mud.	
					2 4	Loose gravel.	
					11 11		Found rock.
	31	48	6 0		6 6	Alluvial clay.	
					1 0	Marl.	
					1 6	Mud.	
					1 5	Sand.	
					6 10	Soft clay.	
					1 9	Clay and gravel.	
					19 0		Found rock.
	31	49	6 6	–	1 5	Peaty clay soil.	
					1 6	Dark mud.	
					0 8	Marl.	
					5 4	Blue clay, gravel, and stones	
					8 11		Found rock.
	31	50	7 7		0 9	Peaty clay soil.	
					1 10	Blue clay mixed with yellow.	
					0 8	Blue clay and gravel.	
					4 6	Blue clay and some gravel.	
					7 9		Found rock.

Appendix B.
Registry of Borings.

Annalecky and the Doctor's Weir.
ee Pl. No.94.)

REGISTRY of Details of BORINGS —THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
ANNALECKY and the DOCTOR'S WEIR, *Continued.*	Between 32 & 33	51	5 6	–	5 9	Alluvial clay.	
					1 6	Marl.	
					10 9	Blue mud.	
					18 0		Found gravel.
	38	52	0 2	–	4 9	Sand.	
					2 7	Soft clay and gravel.	
					7 4		Stopped in clay and gravel.
	39	53	–	1 3	7 3	Sand.	
					2 5	Soft clay and gravel.	
					9 8		Stopped in clay and gravel.
	38	54	0 6	–	1 0	Soft clay and gravel.	
					4 1	Stiff clay and gravel.	
					5 1		Stopped by rock or large stone.
	39	55	–	1 0	1 7	Soft clay and gravel.	Stopped by rock or large stone.
	44	56	–	0 2	1 0	Gravel.	Found rock.
	44	57	–	1 11	2 2	Gravel.	Found rock.
	44	58	1 10	–	2 8	Loose gravel.	
					3 1	Stiff clay and gravel.	
					5 9		Stopped in clay and gravel.
	44	59	2 7	–	2 6	Soft clay and gravel.	
					1 5	Stiff clay and gravel.	
					3 11		Stopped by rock or large stone.
	Between 45 & 46	60	3 0	–	1 0	Sand, stones, and gravel.	
					3 11	Stiff clay and gravel.	
					2 0	Strong gravel.	
					6 11		Stopped in gravel.
	Between 46 & 47	61	2 10	–	2 0	Loose gravel.	
					4 11	Strong gravel.	
					6 11		Stopped in gravel.
		62	2 9	–	4 11	Strong gravel and clay.	Stopped by rock or large stone.
		63	2 10	–	4 11	Loose gravel.	
					1 9	Strong gravel.	
					6 8		Stopped in gravel.
	47	64	2 8	–	0 6	Loose gravel.	
					1 3	Gravel and clay.	
					0 10	Sand.	
					0 3	Gravel.	
					0 11	Sand.	
					0 5	Strong gravel.	
					4 2		Found rock.
	47	65	3 1	–	3 2	Loose gravel.	
					3 9	Stiff clay and gravel.	
					6 11		Stopped in clay and gravel.
	47	66	3 1	–	4 5	Stiff clay and gravel.	Found rock.
	48	67	2 6	–	2 0	Gravel.	Found rock.
	48	68	2 4	–	4 0	Loose gravel.	Found rock.
	48	69	2 8	–	0 7	Loose gravel.	
					4 1	Strong gravel and clay.	
					4 8		Found rock.
	48	70	4 6	–	4 9	Stiff clay and gravel.	Found rock.
	49	71	2 8	–	0 6	Loose gravel.	
					1 7	Soft clay and gravel.	
					2 1		Found rock.

Appendix B.
Registry of Borings.

Annalecky and the Doctor's Weir.
(See Pl. No. 94.)

Registry of Details of Borings.—The Boyle Water—*Continued.*

Note.—The Datum Level is the Sill of Upper Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Annalecky and the Doctor's Weir, *Continued.*	49	72	3 6	–	4 2	Stiff gravel and clay.	Found rock.
	49	73	4 3	–	3 5	Stiff gravel and clay.	Found rock.
	50	74	4 0	–	7 3	Stiff clay and gravel.	Found rock.
	50	75	3 2	–	0 8	Soft clay and gravel.	
					4 8	Stiff clay and gravel.	
					5 4		Found rock.
	50	76	2 6	–	2 1	Soft clay and gravel.	Found rock.
	51	77	2 5	–	1 8	Soft clay and gravel.	
					1 2	Stiff clay and gravel.	
					2 10		Found rock.
	51	78	2 0	–	0 6	Soft clay and gravel.	
					5 1	Stiff clay and gravel.	
					5 7		Stopped in clay and gravel.
	51	79	2 0	–	0 10	Soft clay and gravel.	
					1 3	Stiff clay and gravel.	
					2 1		Found rock.
	51	80	2 2	–	0 8	Soft clay and gravel.	
					4 5	Stiff clay and gravel.	
					5 1		Stopped in clay and gravel.
	52	81	2 4	–	0 10	Soft clay and gravel.	
					5 4	Stiff clay and gravel.	
					6 2		Stopped in clay and gravel.
	52	82	2 9	–	2 4	Soft clay and gravel.	
					4 1	Stiff clay and stones.	
					6 5		Stopped in clay and stones.
	52	83	1 5	–	1 10	Soft clay and gravel.	
					3 2	Stiff clay and gravel.	
					5 0		Stopped in clay and gravel.
	53	84	0 10	–	1 3	Soft clay, gravel, and stones.	
					3 4	Stiff clay and gravel.	
					4 7		Stopped in clay and gravel.
	53	85	–	0 6	1 11	Soft clay and gravel.	
					1 4	Stiff blue clay.	
					3 3		Stopped in blue clay.
	53	86	0 11	–	2 0	Soft clay and gravel.	
					2 7	Stiff clay and gravel.	
					4 7		Stopped in clay and gravel.
	54	87	1 7	–	2 0	Soft clay and gravel.	
					3 3	Stiff clay and gravel.	
					5 3		Stopped in clay and gravel.
	54	88	0 1	–	2 3	Loose gravel.	
					1 7	Stiff clay and gravel.	
					3 10		Stopped in clay and gravel.
	54	89	–	0 4	1 4	Mud and sand.	
					2 0	Stiff clay and gravel.	
					3 4		Stopped in clay and gravel.
	55	90	–	0 4	1 2	Loose gravel.	
					2 2	Stiff clay, stones, and gravel.	
					3 4		Stopped in clay and gravel.
	55	91	–	2 1	1 8	Stiff clay and gravel.	Stopped in clay and gravel.
	55	92	–	1 1	1 8	Loose gravel.	
					1 0	Stiff clay and gravel.	
					2 8		Stopped in clay, and gravel.

Appendix B.
Registry of Borings.

Cloonacarrow.
(See Pl. No. 95.)

Cootehall.
(See Pl. No. 96.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
CLOONACARROW. (See Pl. No. 95.)	–	1	6 6	–	5 8	Peaty clay soil.	
					2 10	Marl.	
					8 5	Blue mud.	
					16 11		Stopped in blue mud.
	–	2	6 6	–	17 0	Alluvial clay, marl, and blue mud.	Stopped in blue mud.
	–	3	6 6	–	5 8	Peaty clay soil.	
					8 2	Marl.	
					1 8	Blue mud.	
					1 2	Hard gravel.	
					16 8		Stopped in gravel.
	–	4	6 6	–	6 0	Peaty clay soil.	
					2 0	Marl.	
					8 5	Stiff blue clay.	
					0 6	Gravel.	
					16 11		Stopped in gravel.
	–	5	6 6	–	7 6	Peaty clay soil.	
					3 6	Marl.	
					2 7	Blue mud.	
					13 7		Stopped by a stone or rock.
COOTEHALL. (See Pl. No. 96.)	1	1	2 2	–	3 7	Marl.	
					9 9	Mud and gravel.	
					1 2	Stiff blue clay and gravel.	
					14 6		Stopped in clay.
	1	2	2 3	–	3 11	Peaty mud.	
					1 5	Dark marl.	
					3 4	Blue mud.	
					1 2	Stiff blue clay and gravel.	
					9 10		Found rock.
	1	3	–	1 8	2 6	Peaty mud.	
					1 0	Soft blue clay and gravel.	
					1 9	Stiff blue clay and gravel.	
					5 3		Found rock.
	2	4	2 8	–	7 8	Marl.	
					3 2	Blue mud.	
					0 5	Loose gravel.	
					0 10	Stiff clay and gravel.	
					12 1		Stopped in gravel.
	2	5	2 5	–	5 5	Peaty mud.	
					1 5	Loose gravel and clay.	
					6 10		Found rock.
	2	6	–	1 5	0 5	Sand.	
					1 3	Loose gravel.	
					1 5	Gravel and clay.	
					3 1		Found rock.
	3	7	3 3	–	2 5	Peaty mud.	
					1 0	Marl.	
					2 6	Blue mud.	
					2 0	Loose gravel and blue clay.	
					0 8	Close gravel and blue clay.	
					8 7		Found rock.
	3	8	3 0	–	1 10	Peaty mud.	
					2 0	Blue mud and gravel.	
					0 10	Loose gravel.	
					2 1	Close gravel and clay.	
					6 9		Found rock.
	3	9	1 2	–	0 10	Peaty mud.	
					1 5	Gravel and clay.	
					1 3	Soft clay and gravel.	
					3 6		Found rock.

Appendix B.
Registry of Borings.

Cootehall.
(See. Pl. No. 96.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
COOTEHALL—*Continued.*	4	10	3 10	–	1 8	Peaty mud.	
					0 6	Loose gravel.	
					1 11	Blue mud.	
					0 8	Loose gravel.	
					0 2	Blue clay and gravel.	
					4 11		Found rock.
	4	11	2 7	–	1 9	Loose gravel mixed with marl.	
					0 8	Close gravel and clay.	
					2 5		Found rock.
	4	12	3 4	–	0 5	Peaty mud.	
					1 1	Close gravel and blue clay.	
					2 3	Stiff blue clay and gravel.	
					3 9		Found rock.
	5	13	5 0	–	3 0	Sand, mud, and gravel.	
					5 2	Blue mud.	
					3 8	Soft blue clay and gravel.	
					11 10		Found rock.
	5	14	4 1	–	2 5	Dark mud and sand.	
					0 4	Loose gravel.	
					1 9	Blue mud.	
					0 7	Close gravel and clay.	
					3 0	Stiff clay.	
					8 1		Found rock.
	5	15	2 0	–	0 10	Loose gravel.	
					2 8	Stiff clay and gravel.	
					3 6		Found rock.
	6	16	5 3	–	2 10	Strong gravel.	
					6 0	Blue mud and marl.	
					2 4	Stiff clay and gravel.	
					11 2		Found rock.
	6	17	1 7	–	0 10	Mud and sand.	
					1 7	Fine sand.	
					1 5	Soft clay and gravel.	
					1 1	Stiff clay and gravel.	
					0 4	Soft clay and gravel.	
					5 3		Found rock.
	6	18	2 2	–	1 10	Loose gravel, sand, and clay.	Found rock.
	7	19	6 0	–	1 8	Strong gravel.	
					3 4	Soft blue clay and gravel.	
					5 0		Stopped by a stone or rock.
	7	20	1 4	–	2 10	Mud and gravel.	
					0 10	Soft clay and gravel.	
					3 8		Found rock.
	7	21	0 10	–	1 0	Loose gravel.	
					1 6	Soft clay and gravel.	
					2 6		Found rock.
	8	22	5 6	–	4 10	Stiff blue clay and gravel.	Found rock.
	8	23	3 8	–	0 3	Loose gravel.	
					0 7	Sand.	
					0 6	Mud and sand.	
					0 9	Stiff clay and gravel.	
					1 5	Loose gravel and clay.	
					3 4	Stiff clay and gravel.	
					6 10		Found rock.
	8	24	1 2	-	0 6	Loose gravel.	
					1 4	Soft clay and gravel.	
					0 8	Strong gravel.	
					2 6		Found rock.

Appendix B.
Registry of Borings.

Cootehall.
(See Pl. No. 96.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
COOTEHALL—*Continued.*	9	25	7 3	–	2 8	Soil.	
					6 11	Stiff blue clay.	
					9 7		Found rock.
	9	26	2 8	–	1 2	Gravel.	
					1 5	Gravel and clay.	
					2 2	Clay and stones.	
					4 9		Found rock.
	9	27	2 8	–	2 0	Loose gravel.	
					0 8	Strong gravel.	
					0 9	Loose gravel and clay.	
					3 5		Found rock.
	10	28	3 2	–	1 0	Loose gravel.	
					1 8	Stiff blue clay and gravel.	
					2 8		Found rock.
	10	29	4 1	–	0 10	Loose gravel.	
					4 1	Stiff clay and gravel.	
					4 11		Found rock.
	10	30	4 3	–	1 2	Strong gravel.	
					1 3	Mud, clay, and gravel.	
					0 10	Stiff clay and gravel.	
					1 8	Loose gravel and clay.	
					1 4	Stiff clay and gravel.	
					6 3		Found rock.
	11	31	4 11	–	2 4	Stiff clay and gravel.	
					3 9	Soft clay and gravel.	
					1 2	Stiff clay and gravel.	
					7 3		Found rock.
	11	32	4 6	–	1 6	Loose gravel.	
					2 6	Hard gravel.	
					1 7	Stiff clay and gravel.	
					5 7		Found rock.
	11	33	4 4	–	2 2	Loose gravel.	
					1 0	Hard gravel.	
					1 0	Close gravel.	
					4 2		Found rock.
	12	34	9 6	–	3 5	Soft clay.	
					1 2	Clay and stones.	
					2 1	Blue clay and gravel.	
					6 8		Found rock.
	13	35	10 1	–	5 7	Soft yellow clay.	
					0 10	Blue clay and stones.	
					6 5		Found rock.
	13	36	4 10	–	4 6	Hard gravel.	
					3 0	Stiff blue clay and gravel.	
					7 6		Found rock.
	13	37	3 8	–	3 6	Loose gravel, sand and mud.	Found rock.
	14	38	8 10	–	3 8	Yellow clay.	
					2 10	Blue clay and gravel.	
					0 4	Strong gravel.	
					6 10		Found rock.
	14	39	5 0	–	0 9	Mud.	
					0 7	Mud and stones.	
					5 8	Stiff clay and gravel.	
					7 0		Found rock.
	14	40	0 10	–	1 1	Sand and gravel.	
					0 8	Clay and gravel.	
					1 9		Found rock.

Appendix B.
Registry of Borings.

Cootehall.
(See Pl. No. 96.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
COOTEHALL—*Continued.*	15	41	8 0	–	0 11	Soil.	
					3 3	Coarse gravel.	
					0 10	Mud.	
					1 5	Loose gravel.	
					1 7	Stiff clay.	
					0 9	Strong gravel and clay.	
					8 9		Found rock.
	15	42	5 1	–	2 3	Mud.	
					2 8	Strong coarse gravel.	
					3 5	Close gravel and clay.	
					8 4		Found rock.
	15	43	1 10	–	2 3	Mud and gravel.	Found rock.
	16	44	8 0	–	1 3	Soil.	
					1 9	Coarse gravel.	
					0 9	Stiff clay.	
					3 9		Found rock.
	16	45	5 0	–	3 8	Mud.	
					2 8	Sand and gravel.	
					1 10	Coarse gravel.	
					2 1	Stiff clay and gravel.	
					10 3		Found rock.
	16	46	1 7	–	4 11	Mud, loose gravel, & stones.	Found rock.
	17	47	7 3	–	1 0	Moory soil.	
					3 3	Soft clay.	
					1 1	Mud and gravel.	
					1 10	Soft clay and gravel.	
					4 1	Clay, stones, and gravel.	
					11 3		Found rock.
	17	48	4 4	–	1 2	Mud.	
					9 4	Mud and gravel.	
					10 6		Found rock.
	17	49	1 2	–	3 4	Mud, sand, and loose gravel.	Found rock.
	18	50	6 8	–	1 0	Moory soil.	
					2 4	Turf, mud, and sand.	
					2 4	Coarse gravel and clay.	
					5 8		Found rock.
	18	51	5 0	–	1 10	Mud and sand.	
					2 4	Loose gravel.	
					2 6	Soft clay and sand.	
					2 8	Strong clay and stones.	
					9 4		Found rock.
	18	52	–	1 1	1 5	Mud.	
					0 8	Sand.	
					2 1	Stiff clay.	
					4 2		Found rock.
	19	53	7 3	–	0 6	Moory soil.	
					3 6	Strong gravel and clay.	
					4 0		Found rock.
	19	54	5 0	–	0 6	Mud and sand.	
					2 7	Soft clay and gravel.	
					3 8	Strong gravel and clay.	
					6 9		Found rock.
	19	55	0 7	–	1 3	Sand.	
					0 8	Gravel.	
					1 11		Found rock.
	20	56	4 9	–	4 9	Strong gravel.	Found rock.
	20	57	1 10	–	2 6	Loose gravel.	
					2 4	Strong gravel and clay.	
					4 10		Found rock.

Appendix B.
Registry of Borings.

Cootehall.
(See Pl. No. 96.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
COOTEHALL—*Continued.*	21	58	1 1	–	4 1	Fine gravel, stones, & clay.	Found rock.
	21	59	1 4	–	1 2	Fine gravel and clay.	
					1 2	Strong gravel and sand.	
					2 4		Found rock.
	22	60	1 8	–	3 5	Strong gravel, stones, & clay.	Found rock.
	22	61	0 1	–	4 2	Strong gravel and clay.	Stopped in gravel and clay.
	23	62	1 0	–	3 8	Stiff clay and gravel.	
					1 3	Strong clay, stones, & gravel.	
					4 11		Found rock.
	24	63	–	3 4	1 1	Mud and sand.	Found rock.
	24	64	–	1 0	0 10	Mud.	
					1 6	Loose gravel.	
					1 0	Stiff clay and gravel.	
					3 4		Found rock.
	25	65	–	0 9	0 7	Mud and gravel.	Found rock.
	25	66	0 4	–	2 8	Mud.	
					2 6	Loose gravel.	
					1 0	Soft clay and gravel.	
					6 2		Found rock.
	27	67	–	2 5	1 2	Soft clay and gravel.	Found rock.
	27	68	0 3	–	1 3	Soft clay and gravel.	Found rock.
	27	69	1 5	–	1 10	Mud.	
					1 0	Soft clay and gravel.	
					2 10		Found rock.
OXHILL ISLAND. (See Pl. No. 97.)	31	1	2 9	–	0 10	Peaty mud.	
					1 7	Marl.	
					9 10	Mud.	
					12 3		Stopped in mud.
	31	2	7 4	–	1 6	Moory soil.	
					1 6	Soft blue clay.	
					1 9	Loose gravel and clay.	
					7 4	Soft clay.	
					2 4	Clay and gravel.	
					14 5		Found rock.
	29	3	0 4	–	2 6	Dark marl.	
					3 0	Blue mud.	
					0 9	Strong gravel.	
					6 3		Found rock.
	29	4	7 5	–	1 5	Moory soil.	
					0 6	Yellow and blue clay.	
					2 7	Stiff blue clay.	
					2 6	Soft clay.	
					0 4	Stiff clay and gravel.	
					9 8	Stiff clay.	
					17 0		Stopped in stiff clay.
	28	5	0 0	0 0	1 4	Loose gravel.	Found rock.
	28	6	4 9	–	2 1	Fine gravel and mud.	
					11 2	Soft clay and gravel.	
					13 3		Found rock.
	27	7	–	0 5	1 4	Loose gravel.	
					1 6	Fine gravel.	
					2 10		Found rock.
	27	8	5 2	–	1 5	Mud.	
					5 8	Soft clay and gravel.	
					2 0	Soft clay.	
					1 3	Loose gravel.	
					10 4		Found rock.

Oxhill Island.
(See Pl. No. 97.)

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Appendix B.
Registry of Borings.

Oxhill Island.
(See Pl. No. 97.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
OXHILL ISLAND, *Continued.*	27	9	7 3	–	0 3	Moory soil.	
					2 4	Fine gravel.	
					4 11	Fine gravel and clay.	
					2 0	Soft clay and gravel.	
					2 2	Strong clay.	
					11 8		Found rock.
	26	10	–	1 2	0 6	Loose gravel.	
					2 5	Hard gravel and clay.	
					2 11		Found rock.
	26	11	4 7	–	0 10	Gravel and clay.	
					2 4	Mud and sand.	
					0 3	Loose gravel.	
					5 9	Mud and dark marl.	
					0 11	Soft clay and gravel.	
					10 1		Found rock.
	26	12	6 6	–	0 5	Moory soil.	
					2 3	Gravel and stones.	
					9 2	Loose gravel.	
					1 1	Clay, stones, and gravel.	
					12 11		Stopped in gravel.
	25	13	–	0 3	0 7	Loose gravel.	Found rock.
	25	14	4 8	–	1 3	Fine gravel.	
					6 8	Mud and dark marl.	
					3 0	Stiff clay.	
					10 11		Found rock.
	25	15	6 8	–	0 6	Moory soil.	
					0 9	Clay and stones.	
					5 8	Soft clay.	
					7 1	Coarse gravel and stones.	
					14 0		Stopped in gravel.
	24	16	–	1 0	3 8	Loose gravel.	Found rock.
	24	17	6 0	–	2 5	Soft blue clay.	
					0 2	Stiff clay and gravel.	
					8 3	Soft blue clay.	
					2 3	Stiff clay and gravel.	
					13 1		Found rock.
	24	18	6 10	–	0 6	Soil.	
					0 4	Yellow clay.	
					12 8	Soft blue clay and gravel.	
					0 6	Strong clay and stones.	
					14 0		Found rock.
	23	19	7 3	–	2 5	Soft clay.	
					1 0	Soft blue clay.	
					0 5	Loose gravel.	
					10 6	Soft blue clay.	
					1 3	Gravel and clay.	
					15 7		Stopped in gravel.
	23	20	–	1 3	0 1	Gravel.	
					5 0	Marl.	
					2 0	Blue mud.	
					7 1		Stopped in mud.
	22	21	7 6	–	0 11	Moory soil.	
					0 3	Yellow clay.	
					2 8	Soft blue clay.	
					0 9	Fine gravel and clay.	
					12 5	Soft clay.	
					17 0		Stopped in clay.
	22	22	7 3	–	0 6	Moory soil.	
					2 2	Yellow clay.	
					11 6	Soft blue clay.	
					0 4	Strong clay and gravel.	
					14 6		Stopped in gravel.

Appendix B.
Registry of Borings.

Oxhill Island.
(See Pl. No. 97.)

Knockvicar.
(See Pl. No. 98.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
OXHILL ISLAND. *Continued.*	Between 21 & 22	23	7 6	–	1 0	Soil.	
					0 7	Soft clay.	
					9 0	Fine gravel and clay.	
					1 3	Gravel and stones.	
					1 2	Hard clay and gravel.	
					13 0		Stopped in gravel.
	Between 21 & 22	24	7 3	–	1 0	Moory soil.	
					0 7	Soft clay.	
					9 3	Fine gravel.	
					3 0	Loose gravel.	
					13 10		Stopped in gravel.
	21	25	5 2	–	1 0	Loose gravel.	
					4 8	Stiff clay and gravel.	
					3 4	Strong clay and gravel.	
					9 0		Found rock.
KNOCKVICAR. (See Pl. No. 98.)	4	1	7 6	–	1 3	Peaty clay soil.	
					2 3	Mud and sand.	
					3 1	Soft clay and gravel.	
					6 7		Stopped by large stone or rock.
	4	2	7 3	–	1 0	Peaty clay soil.	
					10 11	Mud.	
					3 4	Stiff clay and stones.	
					15 3		Found rock.
	4	3	7 3	–	1 5	Peaty clay soil.	
					3 4	Soft blue clay.	
					2 3	Peaty mud.	
					1 0	Marl.	
					3 6	Soft blue clay.	
					1 4	Soft clay and gravel.	
					12 10		Found rock.
	5	4	7 6	–	1 0	Peaty clay soil.	
					0 5	Yellow clay.	
					2 10	Soft blue clay.	
					1 2	Dark mud.	
					0 8	Marl.	
					4 9	Blue clay.	
					10 10		Stopped by rock or large stone.
	5	5	–	1 0	0 9	Mud and sand.	
					0 9	Fine sand.	
					0 5	Fine gravel.	
					1 9	Fine gravel and clay.	
					3 8		Stopped by rock or large stone.
	5	6	5 4	–	4 3	Mud.	
					0 9	Loose gravel.	
					0 8	Stiff clay.	
					2 0	Stiff clay and gravel.	
					0 10	Soft clay.	
					8 6		Found rock.
	6	7	1 6	–	1 8	Soft clay.	
					1 2	Stiff clay and gravel.	
					1 4	Coarse gravel and stones.	
					4 2		Found rock.
	6	8	6 10	–	3 7	Mud.	
					0 10	Sand.	
					2 5	Stiff clay and gravel.	
					0 8	Strong clay and gravel.	
					2 3	Stiff clay and gravel.	
					9 9		Found rock.
	6	9	5 0	–	2 2	Mud and sand.	
					1 4	Soft clay and gravel.	
					3 2	Stiff clay and gravel.	
					6 8		Stopped by a large stone or rock.

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
KNOCKVICAR—*Continued.*	7	10	2 10	–	1 3	Fine gravel.	
					0 11	Strong clay and gravel.	
					2 2		Stopped by large stone or rock.
	7	11	2 10	–	1 0	Fine gravel.	
					2 9	Gravel and clay.	
					3 9		Stopped by a large stone.
	7	12	7 0	–	1 0	Mud.	
					4 2	Gravel, sand, and clay.	
					3 10	Stiff clay and stones.	
					2 0	Loose gravel and clay.	
					11 0		Found rock.
	7	13	4 2	–	2 4	Gravel and sand.	
					5 4	Loose gravel and clay.	
					1 10	Close gravel and clay.	
					9 6		Stopped in clay.
	8	14	3 9	–	0 3	Loose gravel.	
					3 10	Clay and fine gravel.	
					2 0	Hard gravel.	
					6 1		Stopped in gravel.
	8	15	2 6	–	0 6	Sand and mud.	
					0 5	Gravel and clay.	
					1 11	Strong gravel and clay.	
					2 10		Stopped by a large stone.
	8	16	7 4	–	3 7	Alluvial clay.	
					0 6	Sand.	
					3 9	Clay and gravel.	
					1 0	Strong gravel.	
					2 3	Clay, stones, and gravel.	
					11 1		Found rock.
	9	17	2 0	–	0 7	Fine gravel.	
					1 9	Fine gravel and clay.	
					1 0	Sand and fine gravel.	
					0 4	Clay and gravel.	
					3 8		Stopped by rock or large stone.
	9	18	6 6	–	2 10	Alluvial clay.	
					2 5	Clay, gravel, and stones.	
					5 3		Stopped by a large stone.
	9	19	2 9	–	5 1	Clay, gravel, and stones.	Stopped by large stone or rock.
	10	20	2 10	–	2 8	Soft clay and gravel.	
					2 11	Strong gravel and clay.	
					5 7		Found rock.
	10	21	7 0	–	2 9	Alluvial clay.	
					0 10	Sand.	
					0 6	Fine gravel.	
					2 1	Soft clay.	
					1 2	Stiff clay and stones.	
					7 4		Stopped by a large stone.
	10	22	4 2	–	0 2	Soft clay.	
					4 8	Strong gravel and clay.	
					4 10		Stopped in gravel.
	11	23	1 11	–	4 1	Strong clay and gravel.	Found rock.
	11	24	7 6	–	2 3	Mud.	
					0 7	Sand.	
					3 2	Soft clay and stones.	
					3 8	Stiff clay, stones, and gravel.	
					9 8		Found rock.
	11	25	7 4	–	4 0	Alluvial clay.	
					1 2	Sand and clay.	
					4 11	Soft clay and gravel.	
					10 1		Found rock.

Appendix B.
Registry of Borings.

Knockvickar.
(See Pl. No. 98.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
KNOCKVICAR—*Continued.*	11	26	2 0	–	3 10	Soft clay.	
					2 0	Stiff clay, stones, and gravel.	
					5 10		Stopped in gravel.
	12	27	3 0	–	3 0	Strong clay and gravel.	Stopped by a stone.
	12	28	3 0	–	0 6	Loose gravel.	
					6 10	Strong gravel and clay.	
					7 4		Stopped in clay.
	12	29	7 6	–	2 0	Alluvial clay.	
					1 0	Clay and fine gravel.	
					4 3	Soft clay, stones, and gravel.	
					8 0		Stopped by large stone or rock.
	12	30	0 5	–	5 10	Soft clay, stones, and gravel.	Stopped in gravel.
	13	31	2 11	–	1 9	Stiff clay.	
					1 10	Loose gravel and clay.	
					2 8	Strong gravel and clay.	
					6 3		Stopped in gravel.
	13	32	3 4	–	5 8	Loose gravel and clay.	
					1 6	Strong clay and gravel.	
					7 2		Stopped in gravel.
	13	33	7 2	–	2 10	Alluvial clay.	
					1 3	Soft clay and gravel.	
					0 10	Clay and stones.	
					6 0	Stiff clay and gravel.	
					10 11		Stopped in gravel.
	13	34	2 0	–	2 9	Fine gravel and clay.	Stopped by large stone or rock.
	14	35	2 9	–	2 0	Loose gravel.	
					2 3	Gravel and large stones.	
					4 3		Stopped by a large stone or rock.
	14	36	2 2	–	4 0	Loose gravel and stones.	
					1 0	Strong coarse gravel.	
					5 0		Found rock.
	14	37	2 5	–	1 2	Loose gravel.	
					2 9	Strong gravel.	
					1 9	Loose gravel and clay.	
					0 9	Clay and gravel.	
					6 5		Found rock.
	15	38	3 5	–	1 0	Loose gravel.	
					1 0	Stiff clay and fine gravel.	
					1 1	Hard gravel.	
					3 1		Stopped by a large stone.
	15	39	1 2	–	1 6	Loose gravel.	
					3 11	Clay, gravel, and stones.	
					5 5		Stopped in gravel.
	15	40	5 6	–	3 4	Mud.	
					1 2	Sand.	
					2 2	Coarse gravel and clay.	
					1 4	Fine gravel and clay.	
					0 7	Clay and gravel.	
					8 7		Found rock.
	16	41	3 5	–	1 10	Stiff clay and gravel.	
					0 8	Coarse gravel and stones.	
					2 6		Found rock.
	16	42	3 5	–	0 5	Loose gravel.	
					6 2	Stiff clay, gravel, and stones.	
					6 7		Stopped in clay and gravel.

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Appendix B.
Registry of Borings.
Knockvicar.
(See Pl. No. 98.)

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
KNOCKVICAR—*Continued.*	16	43	5 5	–	2 0	Mud.	
					1 5	Fine gravel.	
					0 7	Strong gravel.	
					4 0		Found rock.
	16	44	7 0	–	3 1	Alluvial clay.	
					0 8	Sand.	
					1 11	Gravel, sand, and clay.	
					5 8		Found rock.
	16	45	7 3	–	1 9	Alluvial clay.	
					1 11	Gravel and clay.	
					3 8		Found rock.
	17	46	4 1	–	1 8	Soft clay and gravel.	
					3 11	Strong clay and gravel.	
					0 4	Soft clay and gravel.	
					5 11		Found rock.
	17	47	3 7	–	3 7	Soft clay and gravel.	Found rock.
	17	48	5 8	–	1 10	Mud.	
					5 4	Soft clay and gravel.	
					7 2		Found rock.
	17	49	7 5	–	2 6	Alluvial clay.	
					3 6	Clay, stones, and gravel.	
					6 0		Found rock.
	17	50	9 9	–	1 6	Soil and gravel.	
					1 6	Yellow clay and sand.	
					1 6	Clay, stones, and gravel.	
					4 6		Found rock.
	18	51	7 6	–	2 7	Alluvial clay.	
					3 3	Stiff clay and stones.	
					5 10		Found rock.
	18	52	4 0	–	2 9	Clay, stones, and gravel.	Found rock.
	18	53	3 7	–	4 9	Clay, stones, and gravel.	Found rock.
	18	54	6 0	–	2 3	Mud.	
					0 9	Sand.	
					3 8	Stiff clay, stones, and gravel.	
					6 8		Found rock.
	19	55	4 1	–	3 9	Loose gravel and clay.	
					0 6	Strong gravel and clay.	
					4 3		Found rock.
	19	56	4 0	–	4 7	Gravel, stones, and clay.	Found rock.
	19	57	4 0	–	8 2	Clay, stones, and gravel.	Stopped in clay and gravel.
	19	58	7 3	–	0 11	Soil.	
					1 9	Blue mud.	
					1 8	Fine sand.	
					2 6	Soft clay, stones, and gravel.	
					0 8	Hard gravel.	
					7 6		Stopped by large stone or rock.
	19	59	7 6	–	1 0	Peaty clay soil.	
					2 10	Alluvial clay.	
					1 0	Blue mud.	
					3 8	Clay, stones, and gravel.	
					8 6		Found rock.
	19	60	7 6	–	1 0	Peaty clay soil.	
					1 6	Alluvial clay.	
					0 8	Clay and gravel.	
					3 2		Found rock.
	20	61	2 8	–	3 8	Soft clay and gravel.	Found rock.

Appendix B.
Registry of Borings.

Knockvicar.
(See Pl. No. 98.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
KNOCKVICAR—*Continued.*	20	62	3 9	–	3 10	Stiff clay and gravel.	Found rock.
		63	3 9	–	3 5	Clay, stones, and gravel.	Found rock.
		64	5 0	–	1 6	Gravel.	Found rock.
	20	65	9 6	–	1 0	Soil.	
					1 9	Yellow clay.	
					0 4	Fine gravel.	
					1 5	Stiff clay.	
					0 4	Fine gravel and clay.	
					0 6	Clay and stones.	
					5 4		Found rock.
	21	66	1 3	–	2 9	Stiff clay and gravel.	Found rock.
	21	67	1 9	–	2 1	Coarse gravel and stones.	Found rock.
	21	68	1 9	–	2 0	Coarse gravel, stones, and clay.	Found rock.
	21	69	8 2	–	1 2	Peaty clay soil.	
					3 0	Yellow clay.	
					0 9	Blue clay.	
					2 3	Clay and stones.	
					7 2		Stopped by large stone or rock.
	22	70	–	1 5	1 6	Loose gravel and clay.	
					0 3	Clay.	
					1 9		Found rock.
	22	71	0 2	–	1 5	Fine gravel and clay.	Found rock.
	22	72	6 0	–	3 10	Soft clay.	
					1 0	Gravel.	
					0 6	Strong clay.	
					3 2	Stiff clay, stones, and gravel.	
					8 6		Found rock.
	23	73	–	1 8	1 2	Soft blue clay.	
					1 4	Coarse gravel and clay.	
					0 8	Clay, and some gravel.	
					3 2		Found rock.
	23	74	1 9	–	4 1	Soft blue clay.	
					0 7	Loose gravel.	
					3 6	Soft clay and fine gravel.	
					8 2		Found rock.
	23	75	7 8	–	1 1	Peaty clay soil.	
					7 9	Stiff clay.	
					3 8	Fine gravel and clay.	
					1 7	Clay and stones.	
					14 1		Found rock.
	23	76	7 8	–	7 5	Alluvial clay.	
					2 11	Stiff clay.	
					1 6	Clay, stones, and gravel.	
					11 10		Found rock.
	24	77	–	1 0	1 10	Strong gravel and stones.	Found rock.
	24	78	0 3	–	0 8	Loose gravel.	
					1 6	Close gravel and clay.	
					2 2		Found rock.
	24	79	0 10	–	1 6	Clay, stones, and gravel.	Found rock.
	24	80	7 9	–	1 0	Peaty clay soil.	
					3 7	Stiff clay.	
					4 3	Stiff clay and stones.	
					8 10		Stopped by large stone or rock.
	25	81	3 4	–	3 2	Loose gravel.	
					0 10	Gravel and soft clay.	
					4 0		Found rock.

Appendix B.
Registry of Borings.

Knockvicar.
(See Pl. No. 98.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
KNOCKVICAR—*Continued.*	25	82	3 6	–	2 10	Fine gravel.	
					0 8	Gravel and clay.	
					3 6		Found rock.
	25	83	3 1	–	3 0	Coarse gravel and stones.	Found rock.
	25	84	3 7	–	0 11	Loose gravel.	
					1 4	Soft clay.	
					0 10	Clay and gravel.	
					3 1		Found rock.
	25	85	5 5	–	1 5	Mud.	
					1 2	Coarse gravel.	
					1 6	Clay, and some gravel.	
					4 1		Found rock.
	25	86	6 8	–	1 11	Alluvial clay.	
					2 8	Coarse gravel and stones.	
					4 9		Found rock.
	26	87	4 6	–	1 11	Coarse gravel.	Found rock.
	26	88	4 4	–	1 4	Coarse gravel, & some clay.	Found rock.
	26	89	3 6	–	2 4	Coarse gravel, clay, and stones.	Found rock.
	26	90	3 8	–	2 2	Coarse gravel and stones.	Found rock.
	26	91	4 0	–	1 1	Gravel and large stones.	Found rock.
	26	92	4 6	–	0 10	Loose gravel.	Found rock.
	29	93	5 0	–	1 10	Loose gravel.	
					0 7	Strong gravel.	
					2 5		Found rock.
	29	94	3 2	–	1 5	Clay and gravel.	Found rock.
	29	95	3 6	–	2 0	Fine gravel and clay.	
					1 1	Clay and stones.	
					3 1		Found rock.
	29	96	3 6	–	1 7	Clay and gravel.	Found rock.
	29	97	5 5	–	1 8	Gravel and stones.	Found rock.
	30	98	1 6	–	0 5	Mud.	
					0 10	Loose gravel.	
					2 0	Soft clay, stones, and gravel.	
					3 3		Found rock.
	30	99	5 6	–	0 7	Gravel.	Found rock.
	31	100	9 6	–	5 3	Alluvial clay.	
					0 11	Stiff clay and stones.	
					6 2		Found rock.
	31	101	2 7	–	1 1	Loose gravel.	Found rock.
	31	102	3 10	–	2 0	Fine gravel and clay.	
					1 11	Coarse gravel and clay.	
					3 11		Found rock.
	32	103	4 0	–	1 9	Stiff clay and stones.	Found rock.
	33	104	3 0	–	1 4	Loose gravel.	
					0 3	Hard gravel.	
					1 7		Found rock.
	33	105	2 9	–	1 3	Gravel.	Found rock.
	34	106	5 7	–	1 9	Gravel and clay.	Found rock.
	34	107	3 4	–	1 0	Clay and gravel.	Found rock.
	35	108	3 9	–	4 7	Clay, stones, and gravel.	Found rock.

Appendix B.
Registry of Borings.

Knockvicar.
(See Pl. No. 98.)

Registry of Details of Borings.—The Boyle Water—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Knockvicar—*Continued.*	35	109	1 7	–	9 5	Mud.	Stopped in mud.
	39	110	8 6	–	0 11	Peaty clay soil.	
					1 8	Soft blue clay.	
					0 9	Soft clay and gravel.	
					1 9	Stiff clay.	
					10 4	Stiff clay and sand.	
					15 5		Found rock.
	36	111	8 6	–	1 9	Peaty clay soil.	
					1 1	Sand.	
					13 1	Mud and sand.	
					0 11	Soft clay and gravel.	
					16 10		Stopped in clay and gravel.
	36	112	2 6	–	1 1	Gravel.	Found rock.
	Near 38	113	8 5	–	1 0	Soil.	
					12 10	Alluvial clay.	
					3 0	Clay and gravel.	
					16 10		Found rock.
	37	114	8 6	–	0 8	Soil.	
					10 8	Soft blue clay and gravel.	
					2 0	Stiff clay.	
					0 6	Stiff clay and gravel.	
					13 10		Found rock.
	37	115	0 2	–	3 5	Mud, sand, and gravel.	
					1 10	Clay and gravel.	
					5 3		Found rock.
	40	116	0 6	–	7 1	Mud, sand, and gravel.	
					0 6	Loose gravel.	
					7 7		Stopped in gravel.
	40	117	–	1 2	– 4	Mud.	
					1 9	Mud, sand, and gravel.	
					0 7	Soft clay and gravel.	
					4 8		Found rock.
	40	118	–	1 2	0 10	Loose gravel.	
					1 9	Mud.	
					0 6	Soft clay.	
					3 3	Stiff clay and gravel.	
					6 4		Found rock.
	Between 40 & 43	119	–	0 4	7 6	Mud.	Stopped in mud.
	41	120	8 3	–	13 8	Alluvial clay.	
					1 0	Clay.	
					14 8		Found rock.
	41	121	0 6	–	0 11	Mud and sand.	
					2 10	Fine gravel and mud.	
					2 11	Coarse gravel and clay.	
					6 8		Found rock.
	41	122	–	0 6	1 10	Loose gravel.	
					0 9	Soft clay and gravel.	
					2 7		Found rock.
	Between 40 & 43	123	4 3	–	6 8	Peaty mud.	
					0 4	Blue clay.	
					3 10	Loose gravel and stones.	
					10 10		Found rock.
	42	124	8 4	–	7 8	Alluvial clay.	
					4 0	Stiff clay and gravel.	
					11 8		Found rock.
	42	125	1 10	–	2 0	Loose gravel.	
					2 5	Clay, gravel, and stones.	
					4 5		Found rock.

Appendix B.
Registry of Borings.
Knockvicar.
(See Pl. No. 98.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
KNOCKVICAR—*Continued.*	42	126	0 11	–	2 2	Loose gravel.	
					1 6	Strong gravel and clay.	
					3 8		Found rock.
	43	127	4 9	–	4 3	Stiff clay and gravel.	Found rock.
	43	128	8 2	–	2 8	Peaty clay soil.	
					8 8	Mud and gravel.	
					1 6	Stiff clay and gravel.	
					12 10		Found rock.
	43	129	0 8	–	0 7	Sand.	
					2 1	Loose gravel.	
					0 10	Clay and gravel.	
					3 6		Found rock.
	44	130	5 6	–	1 1	Soft clay and gravel.	
					2 1	Stiff clay and gravel.	
					0 7	Strong gravel.	
					3 9		Found rock.
	44	131	2 1	–	1 1	Loose gravel.	Found rock.
	45	132	4 6	–	1 4	Soft clay.	
					2 6	Loose gravel, clay, and stones.	
					3 10		Found rock.
	45	133	8 6	–	2 6	Alluvial clay.	
					1 0	Fine gravel and clay.	
					4 8	Stiff clay, gravel, and stones.	
					8 2		Found rock.
	45	134	8 4	–	2 4	Alluvial clay.	
					6 2	Stiff clay and gravel.	
					1 2	Hard gravel.	
					9 8		Found rock.
	45	135	2 8	–	2 2	Coarse gravel.	
					1 0	Strong gravel and clay.	
					3 2		Found rock.
	45	136	2 6	–	1 4	Clay, gravel, and stones.	Found rock.
	Between 45 & 47	137	3 7	–	3 3	Mud and gravel.	
					2 2	Loose gravel and clay.	
					0 9	Hard gravel.	
					6 2		Found rock.
	46	138	2 0	–	1 6	Mud and sand.	
					1 8	Loose gravel.	
					2 6	Coarse gravel and clay.	
					1 6	Stiff clay and gravel.	
					7 2		Found rock.
	46	139	1 5	–	1 4	Loose gravel.	
					0 6	Soft clay and gravel.	
					2 0	Hard gravel and clay.	
					3 10		Found rock.
	47	140	4 2	–	2 10	Mud and gravel.	
					2 0	Soft clay and gravel.	
					4 10		Found rock.
	47	141	1 6	–	2 6	Mud and sand.	
					2 9	Mud.	
					2 11	Gravel and clay.	
					8 2		Found rock.
	47	142	–	2 1	4 2	Loose gravel.	
					0 10	Strong gravel and clay.	
					5 0		Stopped in clay and gravel.

Appendix B.
Registry of Borings.

Knockvicar.
(See Pl. No. 98.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
KNOCKVICAR—*Continued.*	48	143	–	1 4	1 3	Sand and mud.	
					3 0	Soft clay and gravel.	
					4 3		Found rock.
	48	144	0 3	–	1 5	Fine sand.	
					1 9	Fine loose gravel.	
					3 8	Coarse gravel and stones.	
					6 10		Found rock.
	49	145	3 4	–	1 4	Mud.	
					3 8	Clay, gravel, and stones.	
					5 0		Found rock.
	49	146	8 3	–	11 9	Alluvial clay.	
					1 0	Loose gravel.	
					0 11	Clay and gravel.	
					13 8		Found rock.
	49	147	–	0 3	1 5	Mud and sand.	
					1 9	Clay and loose gravel.	
					3 2		Found rock.
	50	148	5 5	–	1 8	Clay and gravel.	Found rock.
	50	149	8 9	–	4 1	Alluvial clay.	
					4 11	Soft clay and gravel.	
					2 3	Stiff clay, stones, and gravel.	
					11 3		Found rock.
	50	150	6 9	–	4 5	Mud.	
					0 11	Soft clay and gravel.	
					5 4		Found rock.
	50	151	–	0 6	3 0	Gravel and stones.	
					1 4	Stiff clay and gravel.	
					4 4		Found rock.
	51	152	5 5	–	4 0	Clay and gravel.	Found rock.
	51	153	6 6	–	3 9	Mud.	
					6 7	Stiff clay, stones, and gravel.	
					10 4		Stopped in clay and gravel.
	51	154	1 9	–	0 3	Mud.	
					0 6	Loose gravel.	
					2 10	Stiff clay, stones, and gravel.	
					3 7		Found rock.
	52	155	5 9	–	2 7	Clay and loose gravel.	Found rock.
	52	156	6 5	–	2 8	Mud.	
					2 0	Loose gravel and stones.	
					3 8	Stiff clay and gravel.	
					8 4		Found rock.
	52	157	2 10	–	1 6	Loose gravel and stones.	
					0 7	Stiff clay, gravel, and stones.	
					2 1		Found rock.
	53	158	6 0	–	1 6	Clay and gravel.	Found rock.
	53	159	6 0	–	1 3	Mud.	
					1 5	Strong coarse gravel.	
					2 8		Found rock.
	53	160	5 6	–	1 9	Loose gravel and stones.	Found rock.
	53	161	2 2	–	0 3	Mud.	
					1 1	Loose gravel and stones.	
					1 4		Found rock.
	62	162	3 6	–	1 10	Stiff clay and gravel.	Found rock.
	62	163	4 2	–	1 11	Loose gravel.	Found rock.

Appendix B.
Registry of Borings.

Knockvicar.
(See Pl. No. 98.)

Registry of Details of Borings.—The Boyle Water—*Continued.*

Note.—The Datum Level is the Upper Sill of Jamestown Lock.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
Knockvicar—*Continued.*	63	164	0 9	–	2 11	Loose gravel.	Found rock.
	63	165	2 6	–	1 5	Mud, sand, and gravel.	
					1 8	Stiff clay.	
					3 1		Found rock.
	64	166	2 8	–	1 4	Loose gravel.	
					1 10	Coarse gravel, clay, and stones.	
					3 2		Stopped in gravel and clay.
	64	167	4 6	–	3 1	Loose gravel.	
					1 10	Strong gravel, clay, and stones.	
					4 11		Stopped in gravel and clay.
	65	168	2 11	–	1 2	Loose gravel.	
					2 2	Coarse gravel, stones, and clay.	
					3 4		Stopped in gravel and clay.
	65	169	4 4	–	0 10	Gravel.	Found rock.
	66	170	6 9	–	0 4	Soil.	
					3 11	Strong gravel, clay, and stones.	
					4 3		Found rock.
	67	171	8 0	–	1 9	Mud.	
					4 0	Mud and gravel.	
					1 9	Stiff clay and gravel.	
					7 6		Stopped in clay and gravel.
	69	172	3 9	–	4 0	Mud.	
					1 10	Coarse gravel and soft clay.	
					5 10		Stopped in gravel and clay.
	70	173	1 9	–	1 2	Strong gravel, clay, and stones.	Found rock.
	70	174	6 3	–	2 1	Stiff clay and gravel.	
					4 7	Stiff clay, stones, and gravel.	
					6 8		Stopped in clay and gravel.
	71	175	2 6	–	1 1	Loose gravel.	
					1 11	Stiff clay, stones, and gravel.	
					3 0		Stopped in clay and gravel.
	71	176	5 8	–	0 4	Mud.	
					1 3	Soft clay and gravel.	
					4 6	Stiff clay and gravel.	
					6 1		Stopped in clay and gravel.
	72	177	3 6	–	0 8	Mud.	
					2 11	Stiff clay and gravel.	
					3 7		Found rock or large stone.
	74	178	4 3	–	4 1	Fine sand.	
					0 11	Stiff clay and gravel.	
					5 0		Stopped in clay and gravel.
	74	179	5 9	–	1 7	Mud and sand.	
					6 6	Stiff blue clay and gravel.	
					8 1		Stopped in clay and gravel.
	74	180	6 0	–	1 6	Loose gravel.	
					0 3	Sand.	
					4 10	Strong gravel, stones, and clay.	
					6 7		Stopped in gravel and clay.
	75	181	5 4	–	0 4	Mud, sand, and gravel.	
					5 8	Fine sand.	
					6 0		Stopped by a stone.
	75	182	2 4	–	2 9	Loose gravel and mud.	
					0 8	Strong gravel and clay.	
					3 5		Stopped in gravel and clay.

Appendix B.
Registry of Borings.

Knockvicar.
(See Pl. No. 98.)

Boyle River.
(See Pl. No. 101.)

REGISTRY of Details of BORINGS.—THE BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above. Ft. In.	Below. Ft. In.	Depth. Ft. In.	Nature of Soil bored through.	REMARKS.
KNOCKVICAR. *Continued.*	76	183	6 6	–	1 0 6 1 7 1	Stiff clay and gravel. Fine sand of different colors.	Stopped in gravel and clay.
	76	184	1 10		0 6 2 8 3 2	Mud, sand, and gravel. Fine sand.	Stopped in sand.
BOYLE RIVER. (See Pl. No. 101.)	Across point of land between 51 and Lough Key.	1	9 3	–	1 8 2 4 18 3 22 3	Moory soil. Sand and mud. Peaty mud.	Stopped in peaty mud.
	Across point of land between 51 and Lough Key.	2	9 6	–	2 8 19 7 22 3	Moory soil. Alluvial clay.	Stopped in alluvial clay.
	Across point of land between 51 and Lough Key.	3	9 2	–	2 6 16 2 3 3 0 4 22 3	Moory soil. Alluvial clay. Marl. Blue clay.	Stopped in blue clay.
	Between 49 & 50	4	9 0	–	2 6 19 9 22 3	Moory soil. Peaty mud.	Stopped in peaty mud.
	Between 47 & 48	5	9 5	–	2 4 19 11 22 3	Moory soil. Alluvial clay.	Stopped in alluvial clay.
	46	6	8 9	–	1 6 20 9 22 3	Moory soil. Alluvial clay.	Stopped in alluvial clay.
	Between 41 & 42	7	9 5	–	0 8 13 6 8 1 22 3	Moory soil. Sand and mud. Alluvial clay.	Stopped in alluvial clay.
	Between 39 & 40	8	8 8	–	1 0 2 8 18 7 22 3	Moory soil. Sand and mud. Alluvial clay.	Stopped in alluvial clay.
	Between 41 & 42	9	9 0	–	2 0 20 3 22 3	Moory soil. Alluvial clay.	Stopped in alluvial clay.
	40	10	8 9	–	1 8 20 7 22 3	Moory soil. Peaty mud.	Stopped in peaty mud.
	Near 38	11	9 3	–	1 6 20 9 22 3	Moory soil. Alluvial clay.	Stopped in alluvial clay.
	Between 34 & 35	12	9 0	–	1 0 6 11 14 4 22 3	Moory soil. Mud and sand. Stiff clay.	Stopped in stiff clay.
	Across point of land between 20 and 33.	13	9 2	–	1 0 12 10 8 5 22 3	Moory soil. Mud and sand. Stiff clay.	Stopped in stiff clay.
	Across point of land between 20 and 33.	14	9 9	–	1 2 6 9 14 4 22 3	Moory soil. Mud and sand. Stiff clay.	Stopped in stiff clay.
	Across point of land between 20 and 33.	15	10 6	–	2 0 6 3 14 0 22 3	Sandy soil. Mud and sand. Stiff clay.	Stopped in stiff clay.

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Appendix B.
Registry of Borings.

Boyle River.
(See Pl. No. 101.)

REGISTRY of Details of BORINGS.—The BOYLE WATER—*Continued.*

NOTE.—The Datum Level is the Upper Sill of JAMESTOWN LOCK.

Name of Place.	No. of Section.	No. of Boring.	Level of Surface of Ground, with reference to the Datum Level. Above.	Below.	Depth.	Nature of Soil bored through.	REMARKS.
			Ft. In.	Ft. In.	Ft. In.		
BOYLE RIVER—*Continued.*	Between 17 & 18	16	9 9	–	2 0	Moory soil.	
					4 4	Soft alluvial clay.	
					15 11	Stiff clay.	
					22 3		Stopped in stiff clay.
	–	17	9 3	–	1 0	Moory soil.	
					17 2	Sand and mud.	
					4 1	Stiff clay.	
					22 3		Stopped in stiff clay.
	Between 7 & 8	18	10 11	–	2 0	Moory soil and sand.	
					5 7	Mud and sand.	
					4 4	Stiff clay.	
					2 0	Sand.	
					7 1	Mud and sand.	
					1 3	Soft blue clay.	
					22 3		Stopped in soft blue clay.
	Between 6 & 7	19	11 6	–	1 6	Moory soil and sand.	
					1 9	Sand.	
					10 6	Sand and mud.	
					4 2	Mud.	
					0 2	Blue clay.	
					18 1		Stopped in gravel.
	Near 1	20	9 11	–	4 10	Gravel, sand, and stones.	Stopped by rock or large stone.
		21	7 0	–	9 2	Strong gravel, clay, and stones.	Stopped by rock or stone.
	In line of steps.	22	7 0	–	0 5	Loose gravel.	
					1 6	Soft clay and gravel.	
					9 2	Strong gravel and stones.	
					11 1		Stopped in gravel.
	North end of steps.	23	9 4	–	0 4	Sand and stones.	
					0 2	Sand.	
					1 11	Mud and sand.	
					4 0	Gravel, clay, and stones.	
					6 5		Stopped by rock or stone.
	South of Island above Boat-house Ford.	24	11 9	–	0 5	Moory soil.	
					5 1	Gravel and stones.	
					5 6		Found rock.
		25	12 1	–	0 4	Moory soil.	
					4 5	Gravel and stones.	
					4 9		Found rock.
		26	11 1	–	1 6	Mud.	
					1 1	Gravel and stones.	
					2 7		Stopped by rock or stone.

Dublin, 21st February, 1839.

W. T. MULVANY, Civil Engineer.

APPENDIX C.

Appendix C.

No. 1.
Kilrush Fishery Pier.
No. and Tonnage of Vessels.

No. 1.—RETURN, showing the NUMBER and TONNAGE of VESSELS frequenting the FISHERY PIER of KILRUSH, for the last Four Years, commencing the 22nd October, 1834.

Years.	Description and Number of Vessels, Sea-going or River. Sea-going.	River.	Tonnage of Vessels per Register.	Description of Cargo.	Turf Boats under 50 Tons.	Amount of Tolls received in each Year.	Observations.
From Oct., 1834, to Oct., 1835,	44	103	6,081	Grain, Coal, Iron, and Timber, &c.	603	About £50 per Annum.	This does not include the vessels which load and unload in the inner harbour, nor does it embrace the quantity of turf boats which load and unload at the turf-quay, at the inner harbour, nor does it include the steamers which ply daily.
From „ 1835, to „ 1836,	48	120	7,043	Do.	630		
From „ 1836, to „ 1837,	49	126	7,197	Do.	690		
From „ 1837, to „ 1838,	72	106	9,661	Do.	560		

Appendix C.

No. 2.
Port of Limerick.

No. Tonnage, and Value of Vessels.

No. 2.—PORT OF LIMERICK.

RETURN, showing the NUMBER and REGISTERED TONNAGE of VESSELS, (distinguishing BRITISH from FOREIGN,) which have entered INWARDS, and cleared OUTWARDS at this PORT, with the ESTIMATED VALUE of the same, from 5th January, 1836, to 6th January, 1839.

Year ending 5th January.	Reported Inwards.						Cleared Outwards.					
	British.			Foreign.			British.			Foreign.		
	No.	Tons.	Value.	No.	Tons.	Value.	No.	Tons.	Value.	No.	Tons	Value.
			£			£			£			£
1837,	521	61,550	615,500	2	375	3,750	662	80,748	607,480	2	368	3,680
1838,	573	63,803	638,030	2	354	3,540	773	90,481	904,810	1	185	1,850
1839,	552	64,473	644,730	3	366	3,660	693	83,247	832,470	3	366	3,660

Vessels to and from the United Kingdom, in *ballast*, are not included in this Return, no record of the same being kept.

No. 3.
No., Tonnage, and Value of Vessels, exclusive of Tralee Creek.

No. 3.—RETURN, showing the NUMBER and REGISTERED TONNAGE of VESSELS, (distinguishing BRITISH from FOREIGN,) which have entered INWARDS, and cleared OUTWARDS at this PORT (exclusive of TRALEE CREEK), with the ESTIMATED VALUE of the same, from 5th January, 1836, to 6th January, 1839.

Year ending 5th January.	Reported Inwards.						Cleared Outwards.					
	British.			Foreign.			British.			Foreign.		
	No.	Tons.	Value.	No.	Tons.	Value.	No.	Tons.	Value.	No.	Tons	Value.
			£			£			£			
1837,	425	54,412	544,120	2	375	3,750	557	72,127	721,270	2	368	3,680
1838,	462	55,766	557,660	2	354	3,540	654	82,007	820,070	1	185	1,850
1839,	468	58,381	583,810	3	366	3,660	574	73,735	737,350	3	366	3,660

Vessels to and from the United Kingdom, in *ballast*, are not included in this Return, no record of the same being kept.

No. 4.—UPPER SHANNON:

TRADE BOATS.—DESCRIPTION and TONNAGE of MERCHANDISE and other Articles, conveyed on the NAVIGATION, in the Years 1835, 1836, and 1837.

Tonnage of Trade Boats.	Draft of Water when laden.				Freight charged by Boat-owners, including Toll.	Years.	Imports and Exports.	Manure.	Grain.	Meal.	Potatoes.	Coal.	Metal or Iron.	Iron-stone.	Lime.	Sand.	Sundries.	Timber.	Slates.	Turf.	Total Number of Tons.	Amount of Tolls received.		
	Summer		Winter.																					
Tons.	F.	I.	F.	I.				Tns.	Tons.	Tns.	Tns.	Tns.	Tons.	Tns.	Tns.	Tns.	Tons.	Tns.	Tns.	Tns.	Tons.	£	s.	d.
3	2	0	2	0	Freights charged is uncertain, as there is very little done in short trips, and the charge is by special agreement.	1835	Imports,	–	50	–	168	60	–	–	–	138	2,398	–	–	12	2,832	50	15	4¾
10	2	6	2	6		–	Exports,	–	5,766	–	85	80	–	266	290	–	70	–	175	–	6.732	46	2	7¼
20	3	0	4	6		1836	Imports,	–	50	–	–	199	–	–	6	116	1,594	56	–	–	2,021	36	19	7½
30	3	0	4	6		–	Exports,	–	3,275	–	145	–	722	146	68	90	150	–	–	–	4,696	34	14	5¼
40	3	0	4	6		1837	Imports,	4	–	30	–	91	–	–	–	528	1,702	72	20	146	2,589	42	16	1¾
50	3	0	4	6		–	Exports,	–	2,832	–	420	–	1,917	–	–	240	257	–	125	–	5,791	42	7	2

The Freight of Goods from Dublin to Cloondrah, is 13*s.*; to Lanesborough, 15*s.*; to Drumsna, 15*s.*; to Carrick, 15*s.*; to Drumshanbo, 16*s.*

JOHN KELLY, INSPECTOR.

TRADE BOATS.—For the Years 1835, 1836, and 1837.

Years.	Name of Lock.	No. and Tonnage of Boats, upwards.		Description and Tonnage of Cargo, upwards.		No. and Tonnage of Boats, downwards.		Description and Tonnage of Cargo, downwards.		Names of Places where Cargoes are actually Shipped.
		No.	Tonnage.	Description.	Tonnage.	No.	Tonnage.	Description.	Tonnage.	
1835,	Drumleague,	–	–	—	–	23	840	Grain and Coal, -	840	Lough Allen
–	Battle Bridge,	22	1,100	Sundries, - - -	250	–	–	—	–	Dublin
–	Jamestown,	70	1,545	Sundries, - - -	1,195	58	1,463	Sand, Potatoes, -	708	Carrick, Jamestown
–	Rooskey,	89	2,664	Potatoes, Turf, - -	1,298	86	2,325	Iron, Stone, Metal,	2,547	—
–	Cloondrah,	–	–	—	–	95	2,856	Timber, - - -	576	Dublin
–	Lanesborough,	92	2,570	Grain, &c., - -	2,150	–	–	—	–	Lanesborough
1836,	Drumleague,	–	–	—	–	13	430	Metal, - - - -	390	Lough Allen
–	Battle Bridge,	16	736	Sundries, - - -	46	–	–	—	–	Dublin
–	Jamestown,	46	1,132	—	862	49	1,171	Grain, - - - -	321	Carrick, Jamestown
–	Rooskey,	71	2,766	—	1,006	54	2,195	—	1,715	Drumsna, &c.
–	Cloondrah,	–	–	—	–	63	808	Sundries, - - -	648	Dublin
–	Lanesborough,	79	2,234	Grain, &c., - - -	1,784	–	–	—	–	Lanesborough
1837,	Drumleague,	–	–	—	–	30	1,160	Grain, Metal, &c.,	1,160	Lough Allen
–	Battle Bridge,	30	1,160	Sundries, - - -	210	–	–	—	–	Dublin
–	Jamestown,	48	1,239	Sand, Coal, - - -	755	48	1,239	Potatoes, - - -	649	Lough Allen, &c.
–	Rooskey,	72	2,112	Timber, Slates, Turf,	1,242	49	2,174	—	1,792	Drumsna
–	Cloondrah,	–	–	—	–	87	2,528	Sundries, - - -	488	Dublin
–	Lanesborough,	82	2,363	Grain, &c., - - -	2,088	–	–	—	–	Lanesborough

JOHN KELLY, INSPECTOR.

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SURVEY

OF THE

RIVER SHANNON

UNDER THE ACT V.&VI Wm. 4th CAP. 67

INDEX MAP

FROM

LOUGH REE TO LOUGH ALLEN

Shewing the Sites of the Proposed Improvements

1838.

Compiled from the Ordnance Survey

by CHARLES TARRANT, SENr. Civil Engineer.

Scale of this Index ½ Inch to One Statute Mile

8 Furlongs 0 1 2 3 4 5 6 7 Miles

NOTE.

The figures on the different Lakes are the Heights above Low Water Spring Tides as determined by the Ordnance.

The Red Lines in the Carnadoe Waters shew the extent to which Improvements are intended.

The Sites of the Proposed Improvents are shewn in Red thus

County Bounds thus

Barony Do. Do.

Standidge & Co. litho. London

COUNTY OF ROS
CLOON
BARONY OF ROSCOMMON
PARISH OF LISSANUFFY
BARONY OF BALLINTOBBER
PARISH OF CLOONTWISCARD
ERRA
DERRAHANNY
Erra
PL 22
PL 23
CLOONTWISCARD
PL 20
PL 21
Kilnacarrow
Cloonbearlaw
BALLYGLASS
KILNACARROW
CORTGALLON
CLOONMUSTRA
CLOONBEARLAW
CLOONKEEL
PARISH OF
From Roscommon
CULLIAGHY
CLOONADDRA
KILNACLOGHY
SHANBALLYMORE
BALLYLEAGUE
BALLYCLARE
Ballyleague
DERRYREAGUE
MOUNTDAVIS
CLOONBONY
BALLYNAKILL
BARONY OF
PARISH OF RATHCLINE
BARONY OF RATHCLINE
PL 17 18.19
AGHAMORE
LANESBOROUGH
To Longford
LOUGH REE
19.16
COMMONS NORTH
CURREEN
COUNTY OF LON
RATHCLINE

Pl. No. 3.

141

SURVEY

OF THE

RIVER SHANNON,

UNDER THE ACT V & VI Wm 4th CAP. 67.

TARMONBARRY,

TO

JAMESTOWN CANAL.

Shewing the Sites of the proposed

Improvements.

1838.

THOMAS BARTON, *Civil Engineer*

THOs H WHITE, } *Surveyors.*
JOHN TULLY,

Standidge & Co Litho. London

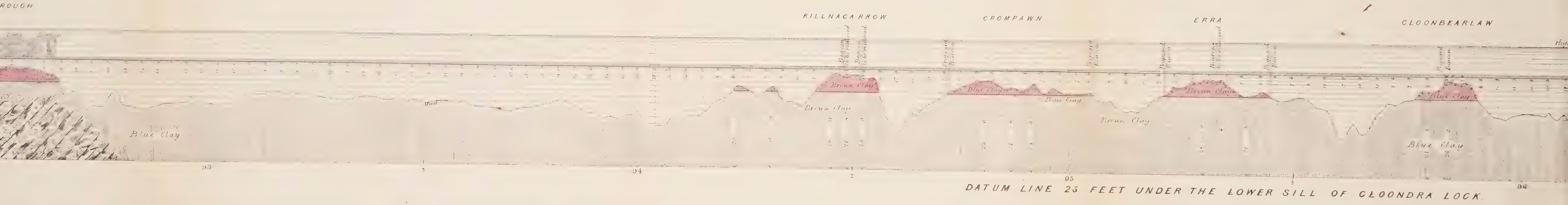
CO. ROSCOMMON
BARONY OF BALLINTOBBER
BARONY OF ROSCOMMON
PARISH OF AUGHRIM
PARISH OF KILMORE
PARISH OF KILLUMMOD
PARISH OF KILLUKAN
BALLAGH LOUGH
LOWFIELD LOUGH
CARTRON LOUGH
LOUGH TAP
DRIMGILRA or GORTINTY LOUGH
Derryoughter
JAMESTOWN CANAL
Canal to be widened and deepened
PL.Nº 61
Corry
Ardnaffron
Cloonteem
Drumleavry
Gillycunway
Kilbride Deer Park
Shoal to be deepened
PL.Nº 64
PL.Nº 65
Gort
Rue
Curries
Cartron
PL.Nº 66
LOUGH CORRY
Channel to be dredged
PL.Nº 67
PL.Nº 68
PL.Nº 69
Deansfort
Killukan Church
Curtubber
Ballynarlagh
Jamestown
The River course to be deepened.
JAMESTOWN
PL.Nº 58.
Proposed Regulating Weir and Mill Site
Mail Coach road from Dublin to Sligo
Tully
Attirory
CARRICK ON SHANNON
Townparks
Corryolus
Cloonskevin
To Boyle and Sligo
THE BOYLE
DRUMSNA
PL.Nº 54 & 55
The River course to be deepened
Charlestown Demesne
Charlestown
The River course to be deepened
PL.Nº 56 & 57
Drumdarragh Wood
Mount-campbell
Minkill
Annaduff Church
Annaduff
From Mohill
From Athlone & Roscommon
PARISH OF ANNADUFF
PARISH OF KILTOGHERT
BARONY AND COUNTY OF LEITRIM

C O U N T Y OF R O S C
B A R O N Y OF B O
P A R I S H OF T U M N A
P A R I S H
RIVER SHANNON
Shoal to be deepened
Cleaheen
Derreenannagh
Carrigeen
Lustia
Cloonfad
LOUGH NASEER
Glebe
Hartley
Annaghbea
Caldragh
Port
Battle Bridge
Battle Bridge Lock
Canal Banks to be raised
Proposed New Road
Shoals to be deepened
Drumhearny
Leitrim
Tullylannan
CARRICKEVY LOUGH
BRAN LOUGH
to Ballinamore
Killarcan
Carrickaveril
Bellageert
Termactiernan
Larga
Drumboylan
Drimbrisny
Dromore
Derreenasoo
Wooden Br
R I V E R S H A N N O N
Drumherriff
Differ
Shancurry
Derrintunny
Cuilliard
Cuilkeel
Cuilbalkan
LOUGH NAGALLIAGH
to Keadew
Drumgeaglom
Drumleague Lock
Drumleague
Lough Allen Canal
Cornarey
Drumhauver
Drumgerman Lough
Drumderg
Mahawnagh
Ardcollum
Blackrock
Proposed Towing Path
Gallagh Br.
LOUGH ACRES
Derrynahoo Lough
Drumduff
Acres
Proposed Harbour
Corrachuil
DRUMSHANBO
from Ballinamore
P A R I S H
O F
B A R O N Y AND C O U N T Y

On left side of Boo

LONGITUDINAL SECTION.

REFERRING TO PLAN No 2.



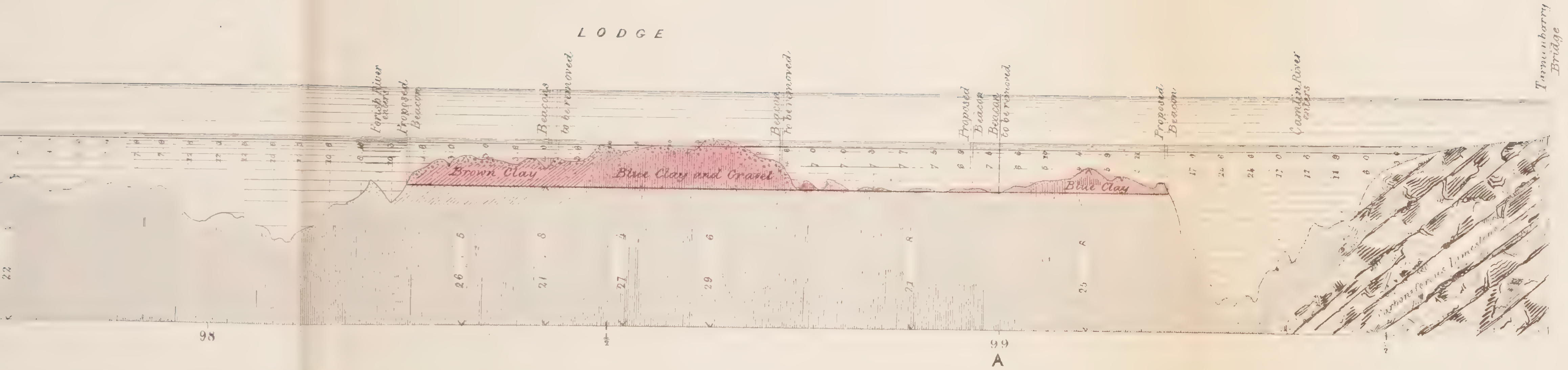
SURVEY
OF THE
RIVER SHANNON.
UNDER THE ACT V & VI W™ 4TH CAP 67

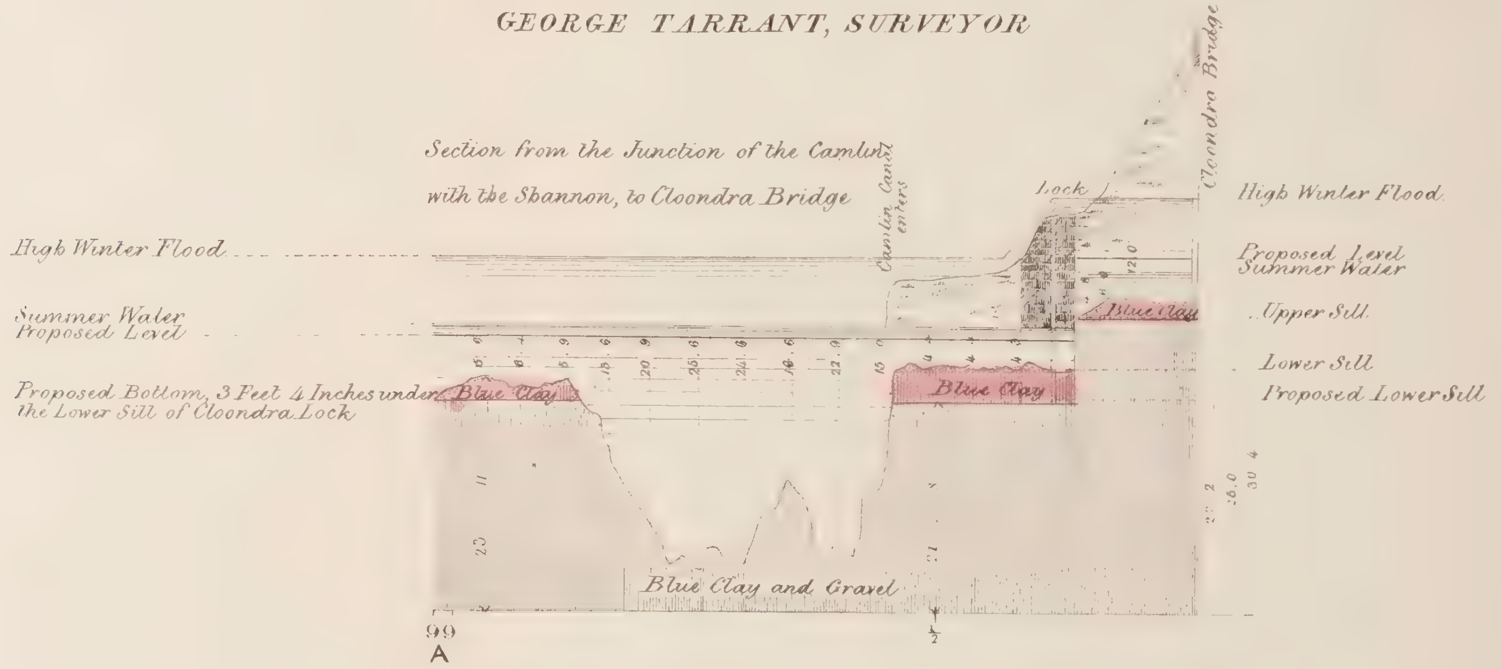
SECTION FROM CURREEN FORD,
ON LOUGH REE,
TO
TARMONBARRY AND CLOONDRA.

Shewing the Proposed Improvements.

1838.

CHARLES TARRANT, SENR ENGINEER
GEORGE TARRANT, SURVEYOR





Scale of Feet for the Lengths of the Section.

Vertical Scale
Feet 20 to an Inch

NOTE.

The above is a continuation of the Navigation commencing at A marked on the General Section to the Bridge over the Camlin Canal.

The Proposed Improvements are marked in Red.

Standidge & Co Lith London

Pl. N° 7.

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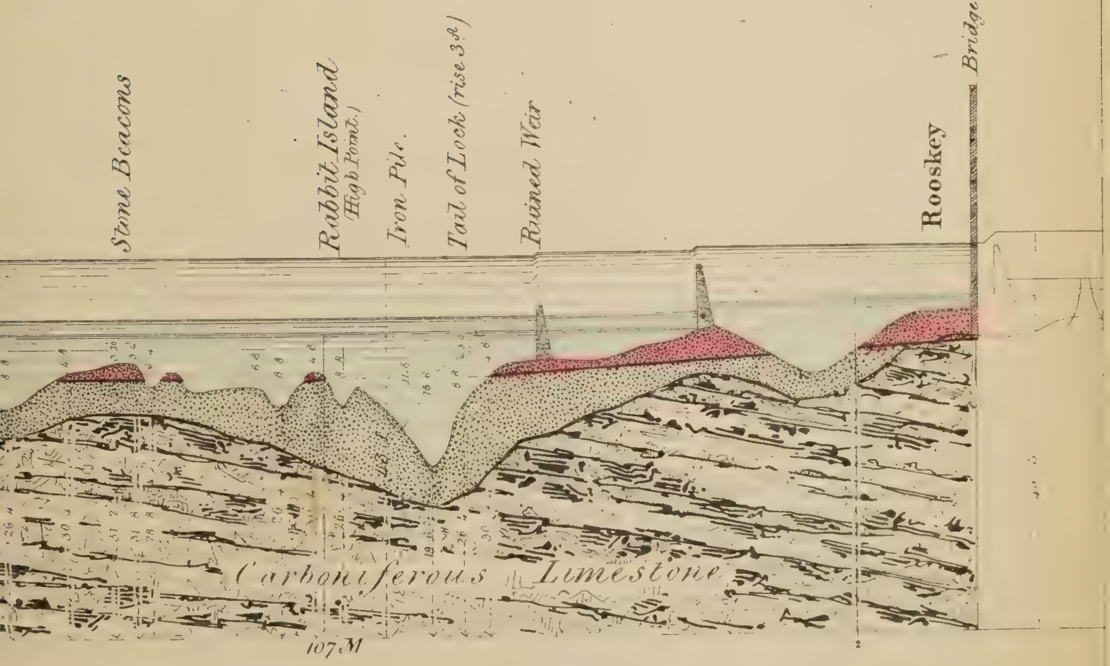
SURVEY
OF THE
RIVER SHANNON.
UNDER THE ACT V & VI. Wm 4TH CAP. 67

Sheet N° 2.
GENERAL SECTION
OF THE
RIVER COURSE
FROM
TARMONBARRY
TO
LOUGH NA NOUGE.
OPPOSITE
JAMESTOWN CANAL
Shewing Proposed Improvements,
1838.

THOMAS BARTON, Civil Engineer.
THOMAS H. WHITE, } Surveyors
JOHN TULLY }



D 1º.

ROOSKEY

NOTE. *The Red Tint shews the required deepening of the Shoals*

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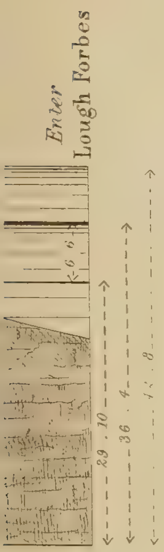
Pl. N° 8

151



SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm IV CAP 67

LONGITUDINAL SECTIONS
of the present lines of
NAVIGATION
at
CLOONDRAH
and
ROOSKEY
1838

THOMAS BARTON, Civil Engineer.

6000 feet

60 feet

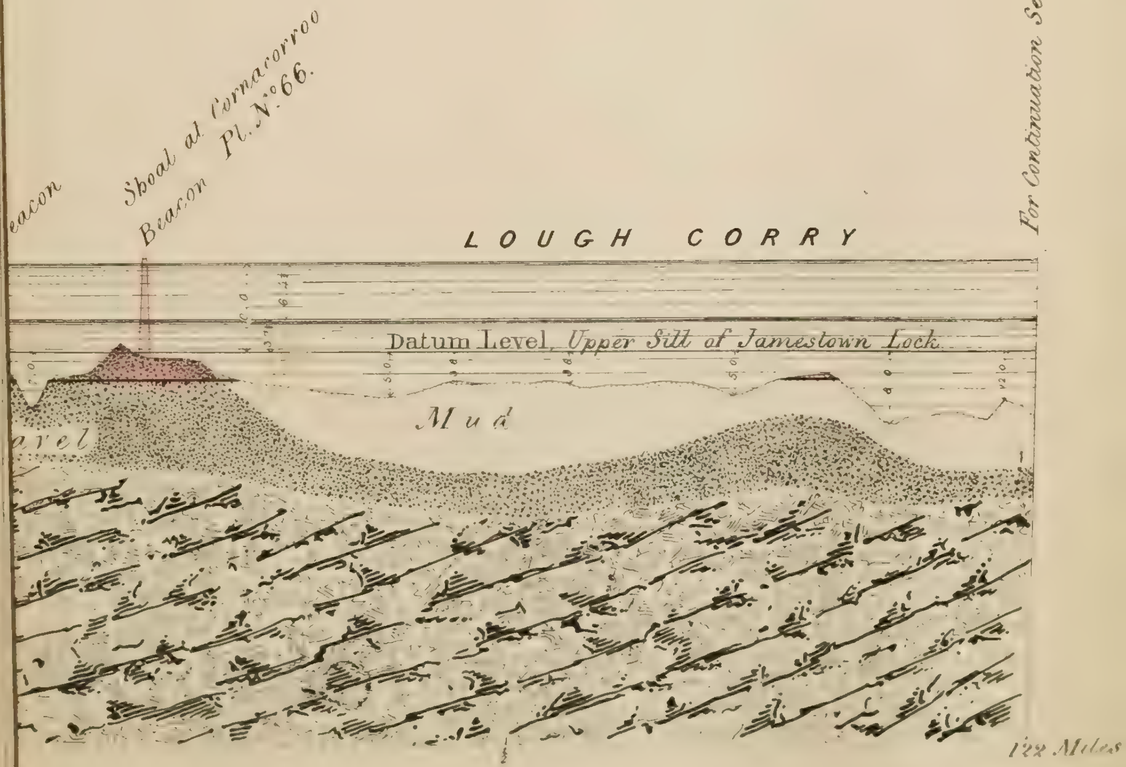
Standidge & C° Litho London

SURVEY
OF THE
RIVER SHANNON.
UNDER THE ACT V & VI Wm 4TH CAP 67

Sheet N°3.
GENERAL SECTION
OF THE
RIVER COURSE
FROM
LOUGH NANOGE
TO
LOUGH CORRY.

1839.

Wm T. MULVANY, Civil Engineer.
JOHN LONG, Surveyor.



For Continuation See Sheet N°4

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SURVEY

OF THE

RIVER SHANNON.

UNDER THE AC V. & VI. Wm 4TH CAP. 67.

N°4.

GENERAL SECTION

OF THE

RIVER COURSE,

FROM

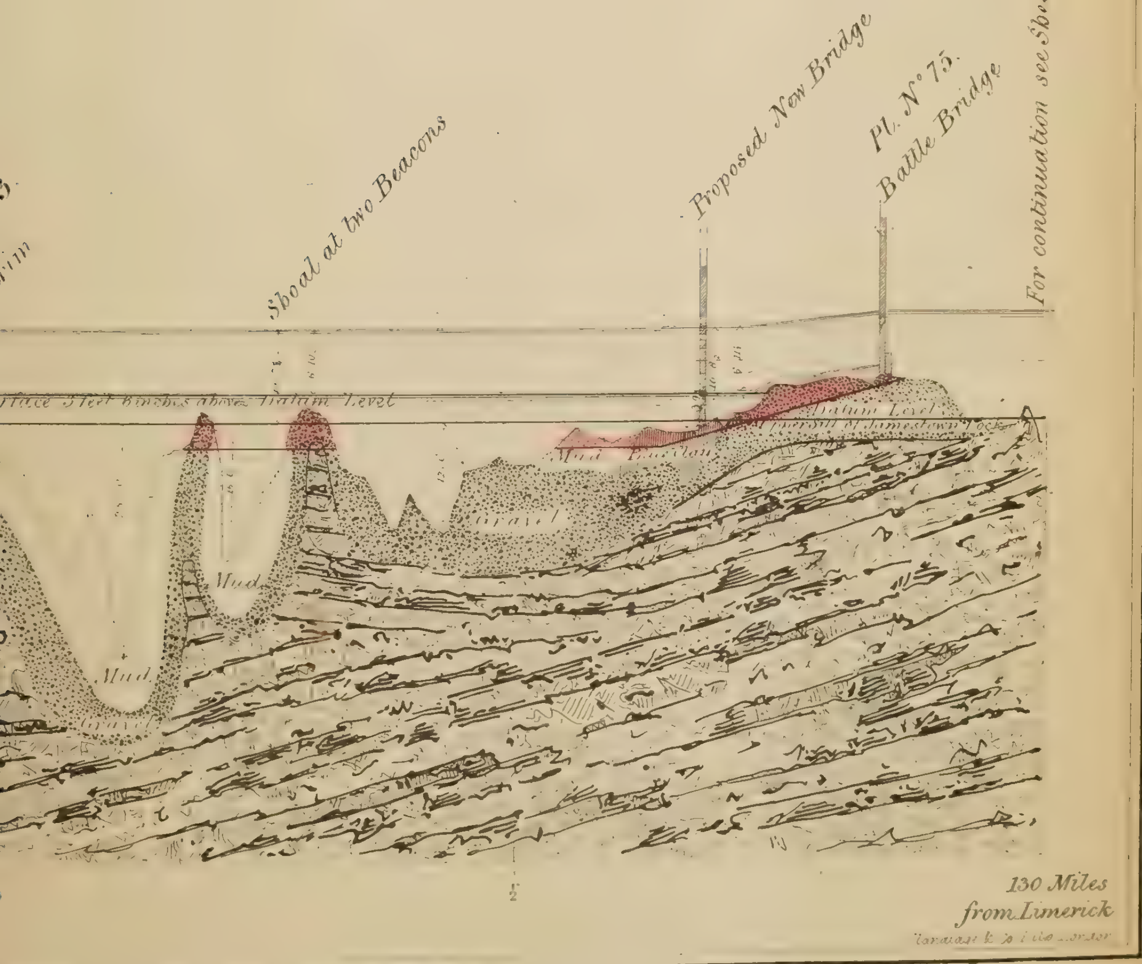
LOUGH CORRY

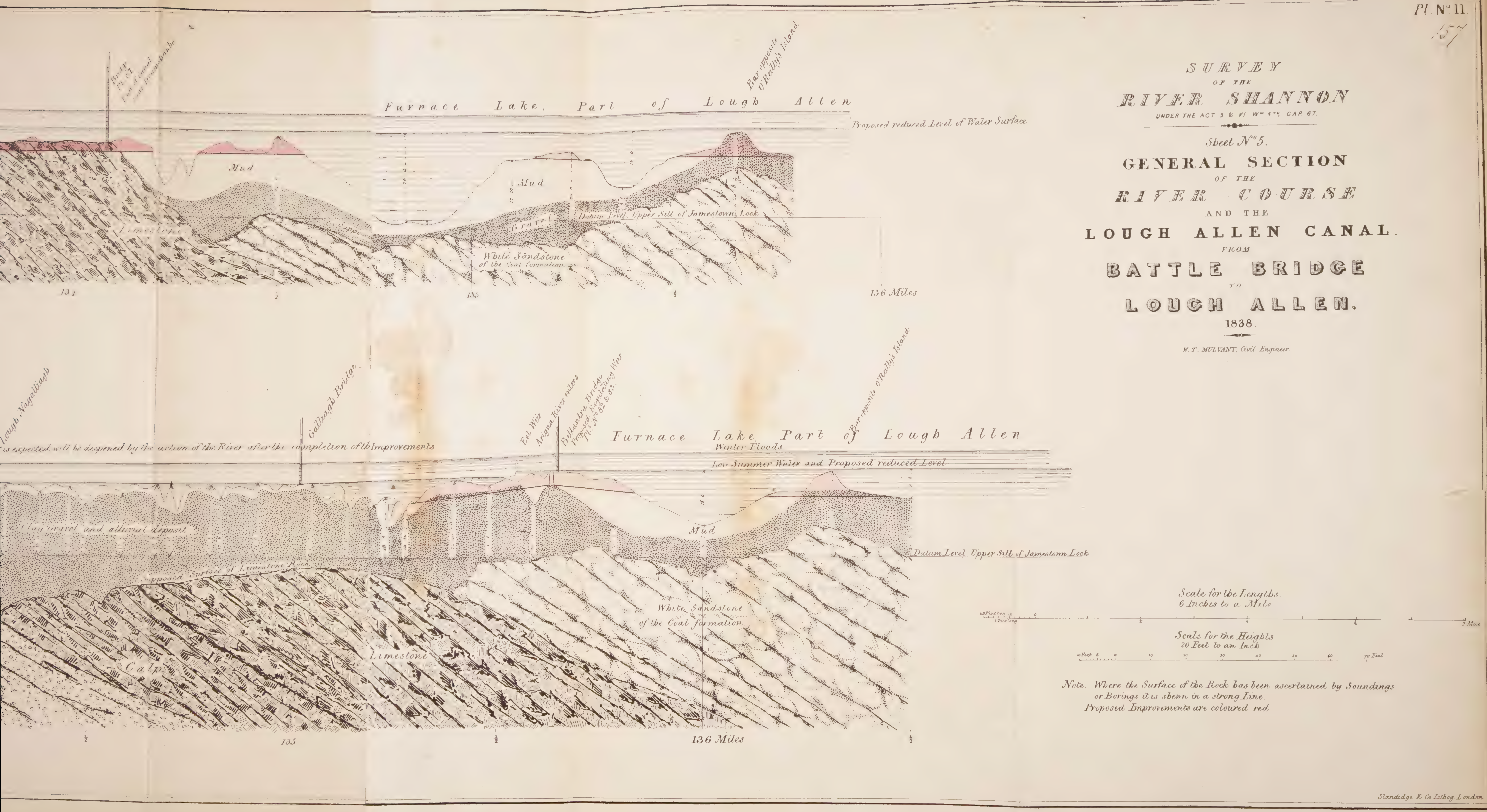
TO

BATTLE BRIDGE.

1839.

WILLIAM. T. MULVANY, Civil Engineer.




Pl. N° 11.
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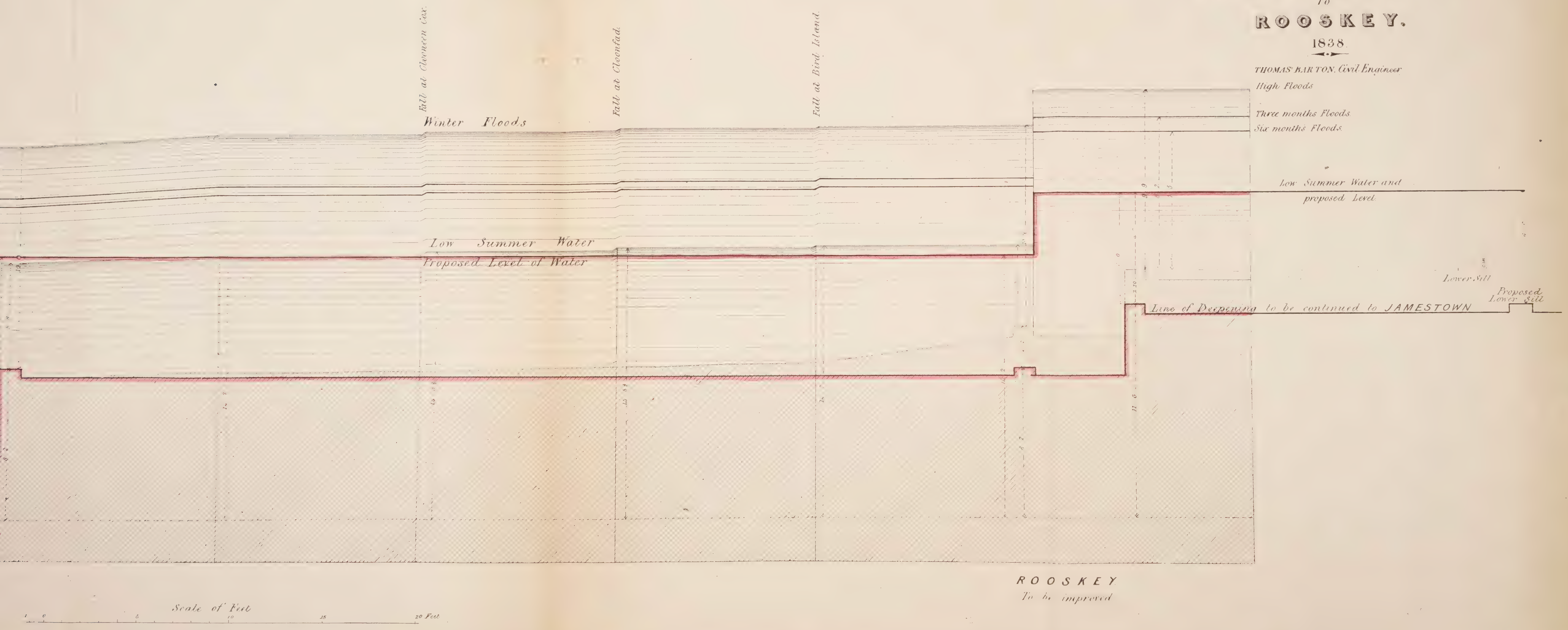
SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT 5 & VI Wm 4th CAP. 67.
Sheet N° 5.
GENERAL SECTION
OF THE
RIVER COURSE
AND THE
LOUGH ALLEN CANAL.
FROM
BATTLE BRIDGE
TO
LOUGH ALLEN.
1838.
W. T. MULVANY, Civil Engineer.
Bar opposite O'Reilly's Island
Furnace Lake, Part of Lough Allen
Proposed reduced Level of Water Surface
Mud
Mud
Limestone
Gravel
Datum Level Upper Sill of Jamestown Lock
White Sandstone of the Coal Formation
134
135
136 Miles
Lough Nagalliagh
Galliagh Bridge
Eel Weir
Argna River enters
Bellantra Bridge
Proposed Regulating Weir
Bar opposite O'Reilly's Island
is expected will be deepened by the action of the River after the completion of the Improvements
Furnace Lake, Part of Lough Allen
Winter Floods
Low Summer Water and Proposed reduced Level
Clay Gravel and alluvial deposit
Mud
Datum Level Upper Sill of Jamestown Lock
Supposed Surface of Limestone Rock
White Sandstone of the Coal formation
Limestone
Calp
135
136 Miles
Scale for the Lengths.
6 Inches to a Mile.
Scale for the Heights
20 Feet to an Inch.
Note. Where the Surface of the Rock has been ascertained by Soundings or Borings it is shewn in a strong Line.
Proposed Improvements are coloured red.
Standidge & Co. Lithog. London.

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI. Wm 4TH CAP 67.

LEVELS OF LOCKS
FROM
LANESBOROUGH
TO
ROOSKEY.
1838.

THOMAS RARTON, Civil Engineer



Pl. Nº 13.

SURVEY
OF THE
IVER SHANNON
UNDER THE ACT. V & VI Wm 4TH CAP. 67.

DIAGRAM SECTION
SHEWING IN A CONDENSED FORM
THE LEVELS
OF THE
NT AND PROPOSED LOCK SILLS
IN THAT PART OF THE
NNON NAVIGATION
EXTENDING FROM
ROOSKY
TO
LOUGH ALLEN.
1838.

Wm T. MULVANY, Civil Engineer.

Scale for the Heights
4 Feet to an Inch

5 10 15 20 25

NOTE.

The Proposed Improvements are shewn in Red.

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Pl. No 14
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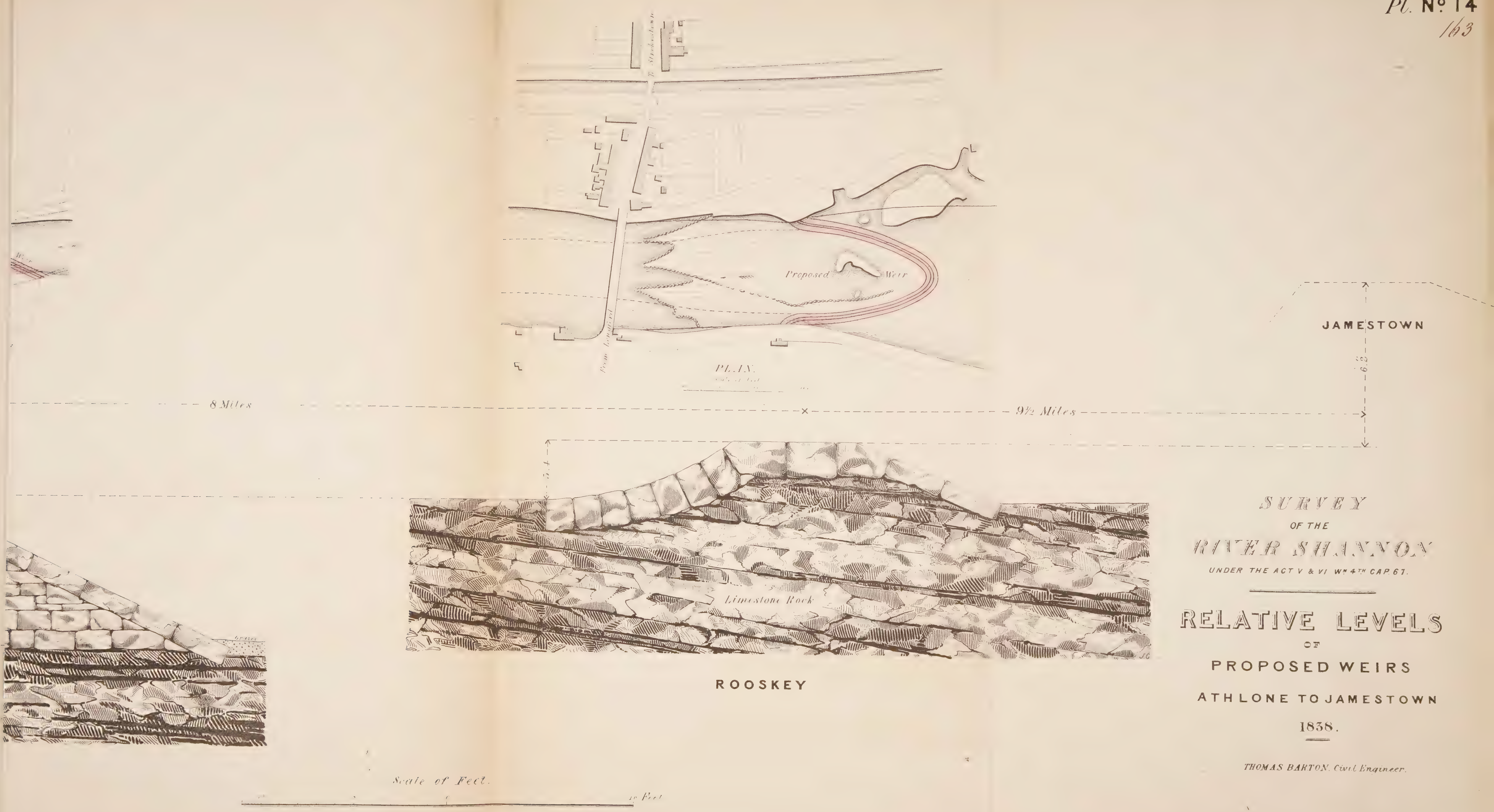


SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm 4TH CAP 67.

RELATIVE LEVELS
OF
PROPOSED WEIRS
ATHLONE TO JAMESTOWN
1838.

THOMAS BARTON. Civil Engineer.

Standidge & Co Litho London

SURVEY

OF THE

RIVER SHANNON

UNDER THE ACT V & VI Wm 4TH CAP. 67

DIAGRAM SECTION

OF THAT PART OF THE

SHANNON,

EXTENDING FROM

LOUGH NANOGE,

BY THE

RIVER COURSE,

TO

LOUGH ALLEN.

Shewing, in a condensed Form,

THE LEVELS

of the

Present Summer Water & Winter Floods

Together with the Highest Points

of the

Several Shoals and other Impediments

To the

Discharge of the Floods.

Also the

Proposed Regulating Weirs

And

Reduced Levels of the Waters.

1838.

Wm T. MULVANY, *Civil Engineer.*

Scale for the Heights

A Quarter of an Inch to a Foot

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

The Heights of Water represented on this Section have been determined from a number of observations made during the last year, and checked and completed from the Registry kept for the last three years at the several Locks on this part of the Navigation.

The height to which the Floods on the reach of the River extending from Jamestown Bridge to Battle Bridge attain is chiefly attributable to the height and extent of the obstructions at Jamestown Mill and Bridge.

The Levels are marked in Feet and Inches, the Datum Level being the Upper Sill of Jamestown Lock.

Standidge & Co Litho London

SURVEY

OF THE

RIVER SHANNON

UNDER THE ACT V AND VI Wm. 4 CAP. 67.

CURREEN.

PLAN AND SECTIONS

OF

SHOAL.

1838.

CHARLES TARRANT SENr. Civil Engineer.

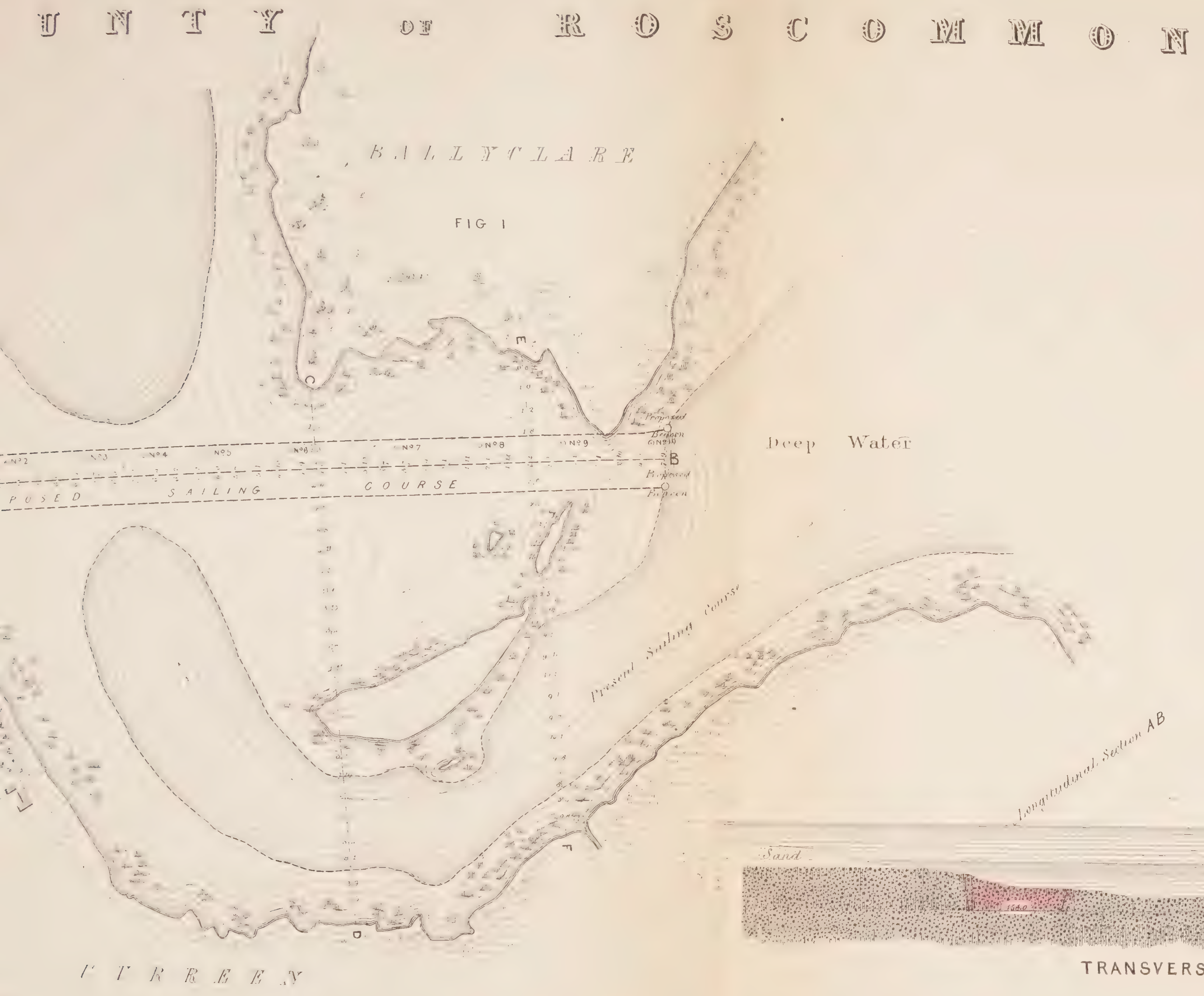
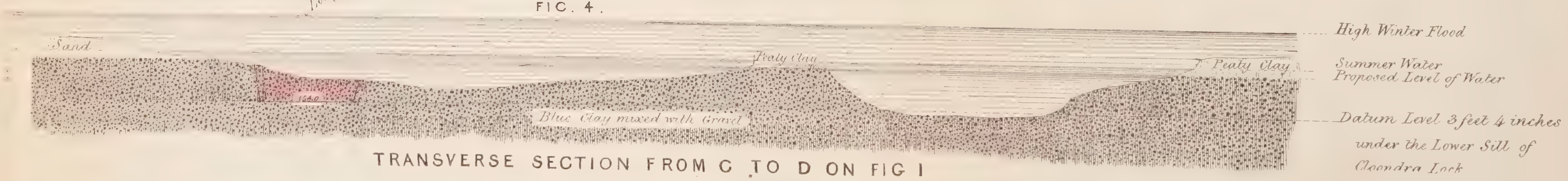
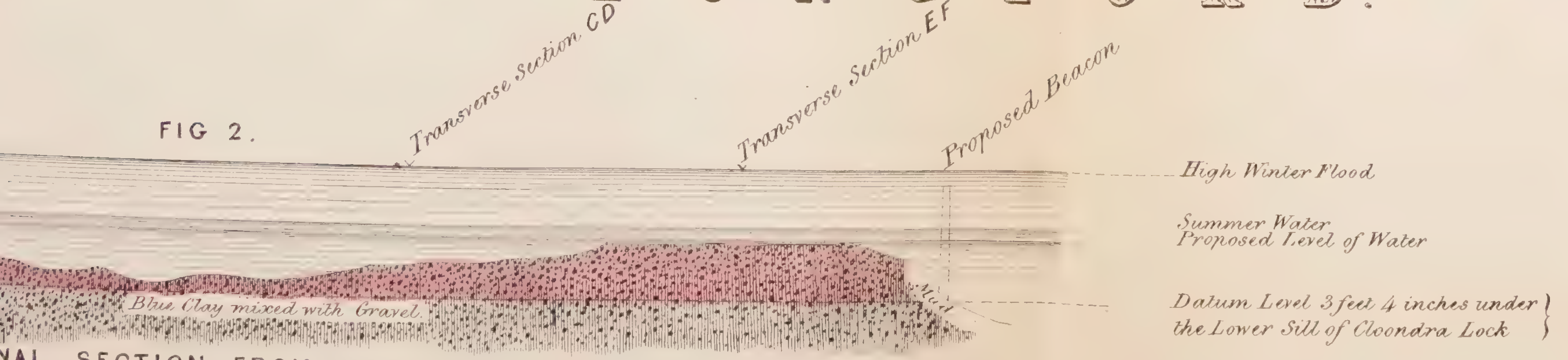


FIG. 4.



TRANSVERSE SECTION FROM C TO D ON FIG I

FIG 2.



NAL SECTION FROM A TO B ON FIG. I.

NOTE.

The Parts tinted Red on the Sections shew the required deepening.

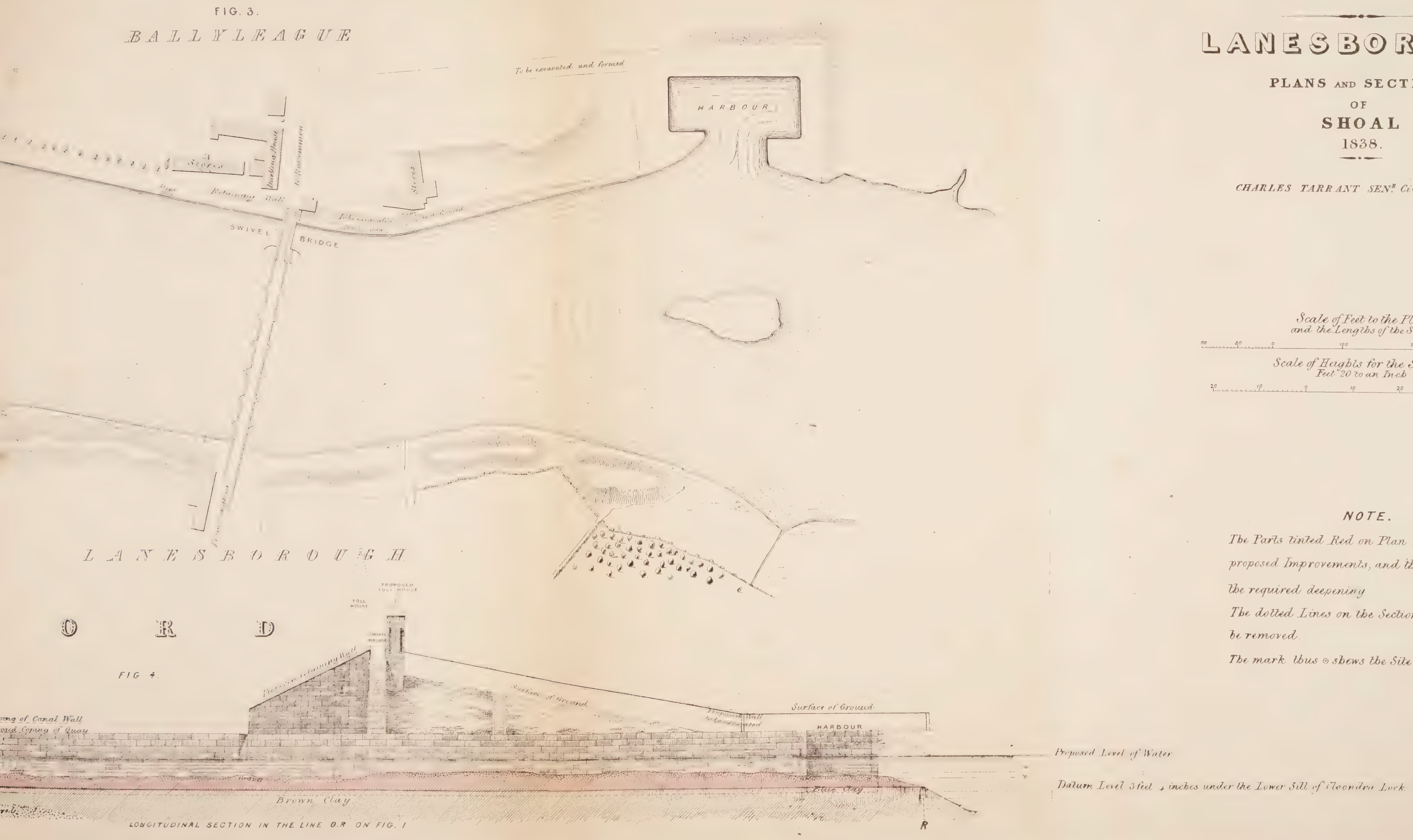
The Soundings are marked in feet and inches.

The Mark thus ⊙ shews the site of the Borings

Standidge & Co Lith. London.

M O N

PLAN OF RIVER SHEWING THE PROPOSED IMPROVEMENTS.



O R D

SURVEY OF THE RIVER SHANNON

UNDER THE ACT V & VI Wm 4th CAP 67.

LANESBOROUGH.

PLANS AND SECTIONS OF SHOAL

1838.

CHARLES TARRANT SENR. Civil Engineer

Scale of Feet to the Plan and the Lengths of the Sections.

Scale of Heights for the Sections Feet 20 to an Inch

NOTE.

The Parts tinted Red on Plan FIG 3 shew the proposed Improvements, and those on the Sections the required deepening.

The dotted Lines on the Sections shew the Parts to be removed.

The mark thus ⊙ shews the Site of the Borings.

Standidge & Co lithog London

171

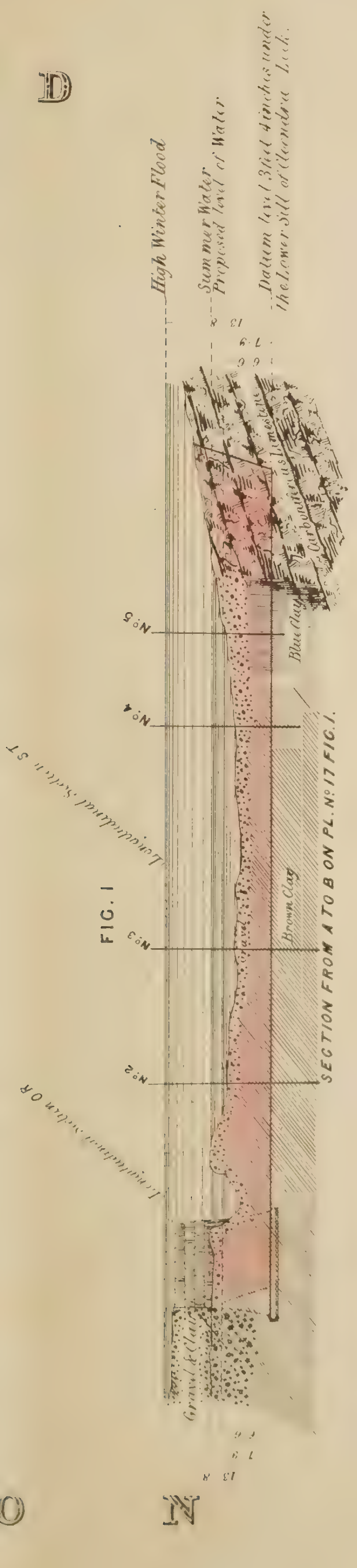


FIG. 1

SURVEY
OF THE
RIVER SHANNON,
UNDER THE ACT V. AND VI. Wm. 4th CAP. 67.

TRANSVERSE SECTIONS
OF THE
RIVER SHANNON
AT
LANESBOROUGH.
1838.

CHARLES TARRANT SENr. Civil Engineer.

Scale of Lengths 100 Feet to an Inch

100 50 0 50 100 150 200

Scale of Heigths 20 feet to an Inch.

20 10 0 10 20 30 40

NOTE.

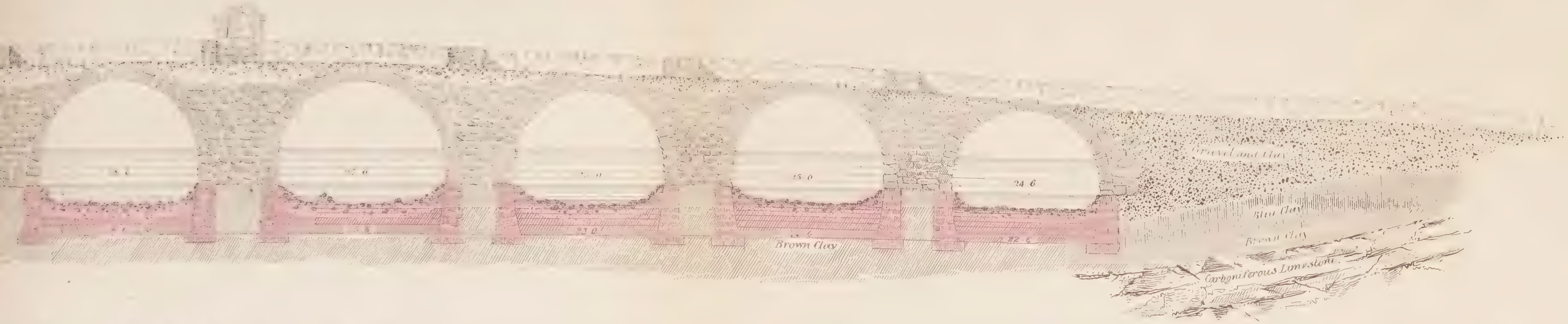
The Parts tinted Red shew the required deepening, the dotted lines the Walls and Embankments to be removed

Standidge & Co. Litho. London

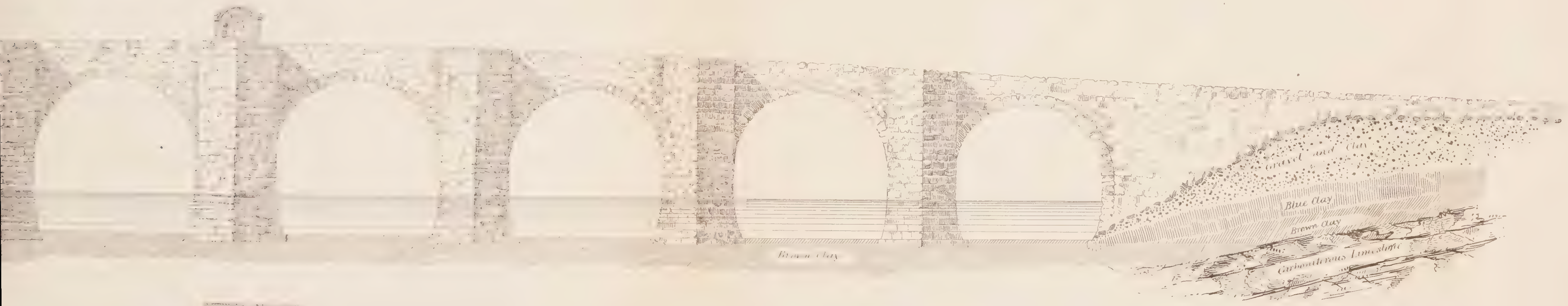
Plan No. 19.

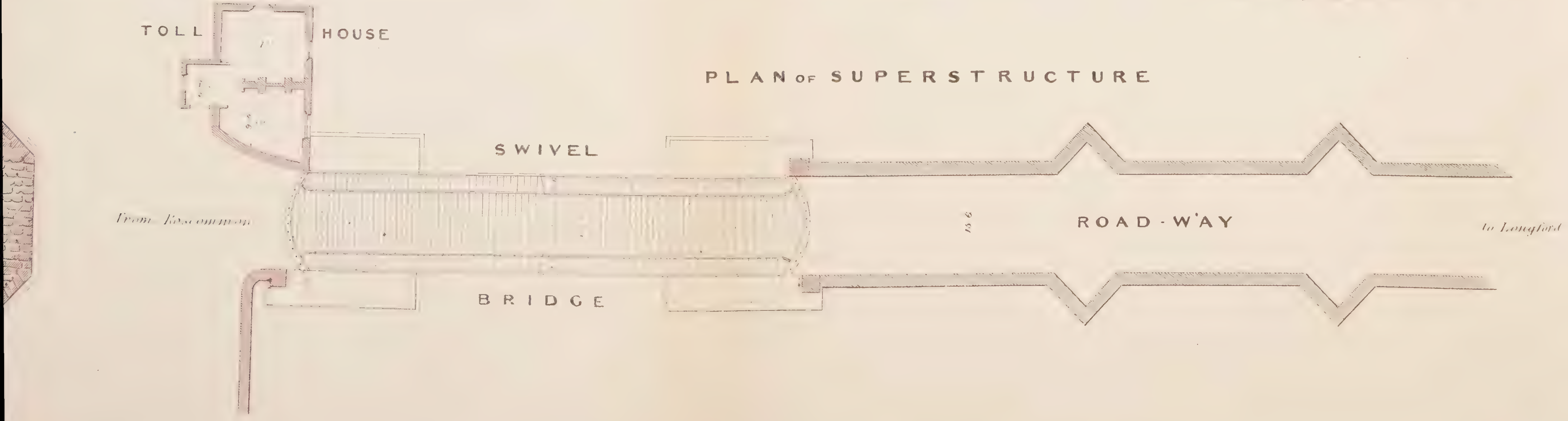
173

[LON]GITUDINAL SECTION.



ELEVATION.





SURVEY

OF THE

RIVER SHANNON

UNDER THE ACT V & VI Wm 4TH CAP. 67.

LANESBOROUGH

PLAN ELEVATION AND SECTION

OF

BRIDGE

Shewing the Proposed Improvements

1838.

CHARLES TARRANT, SENR Civil Engineer.
GEORGE TARRANT, Surveyor.

NOTE.

The Parts tinted Red on the Plans & Section shew Proposed Improvements. The dotted Lines on the Section shew the Lock House and the Arches of the Bridge to be removed for the erection of the Swivel Bridge.

Scale 20 feet to an Inch

20 10 0 10 20 30 40

Standidge & Co. Litho. London.

Pl. No. 20

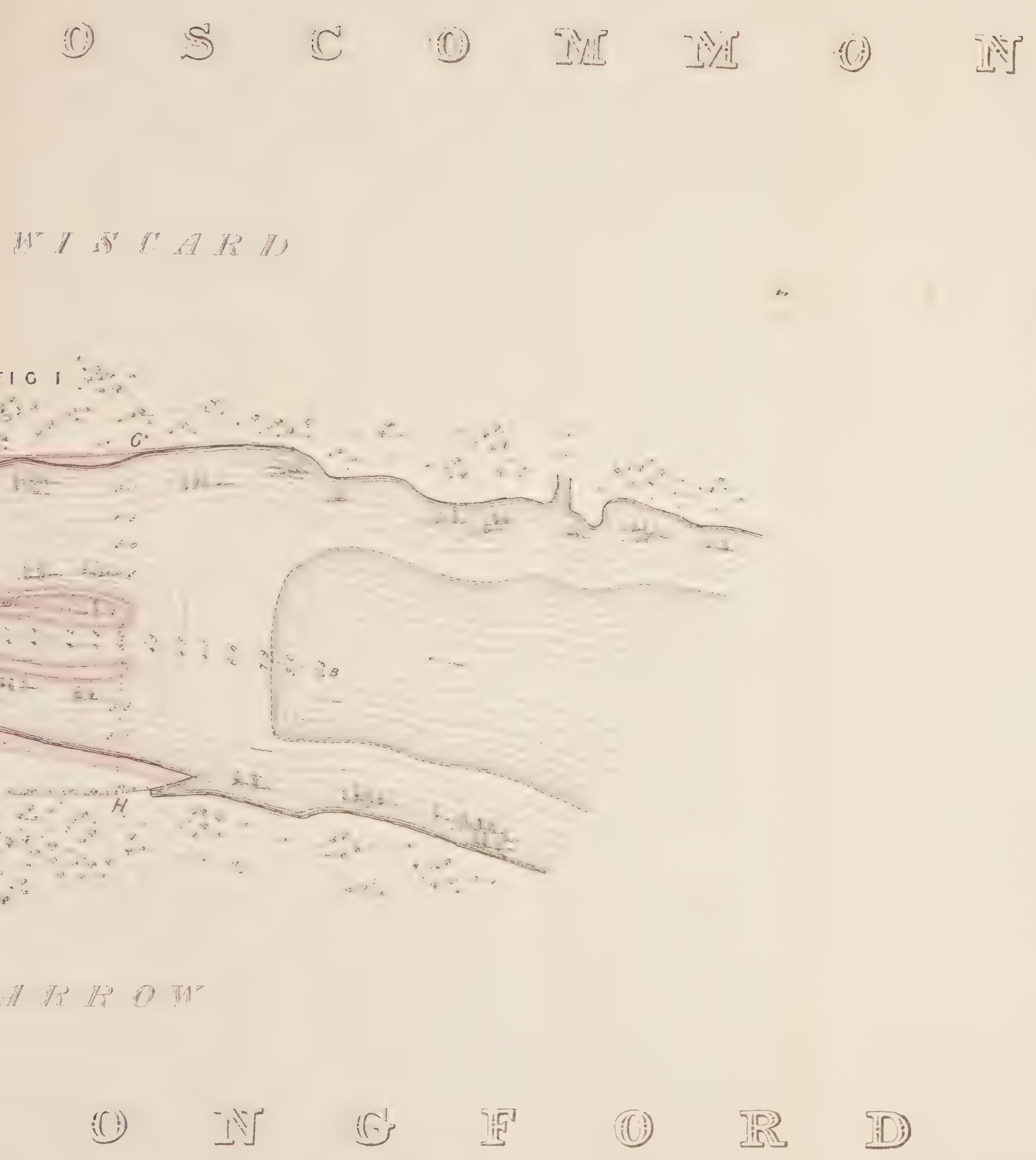
175

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V AND VI Wm. IV CAP 67.

KILNACARROW
PLAN AND SECTIONS OF SHOAL

1838

CHARLES TARRANT, SENr.
Civil Engineer.



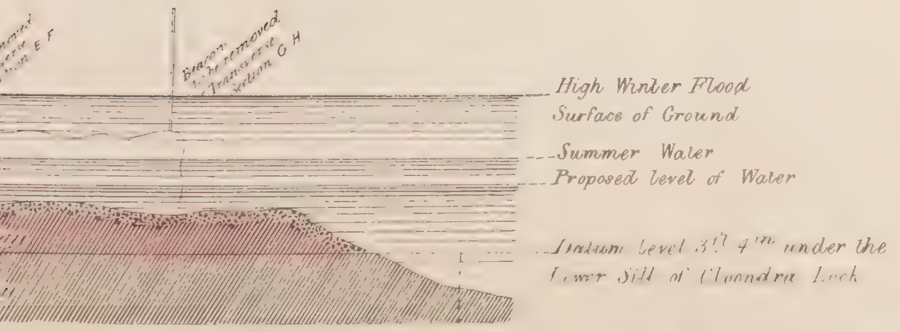
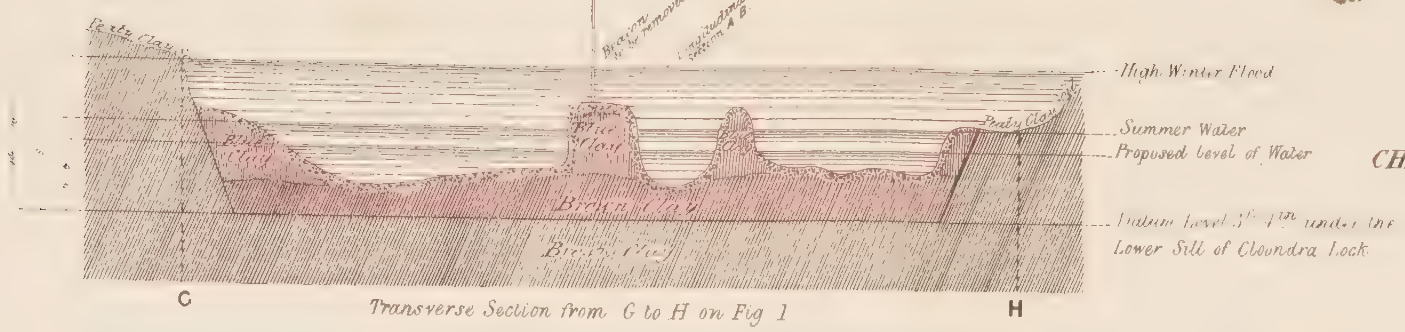


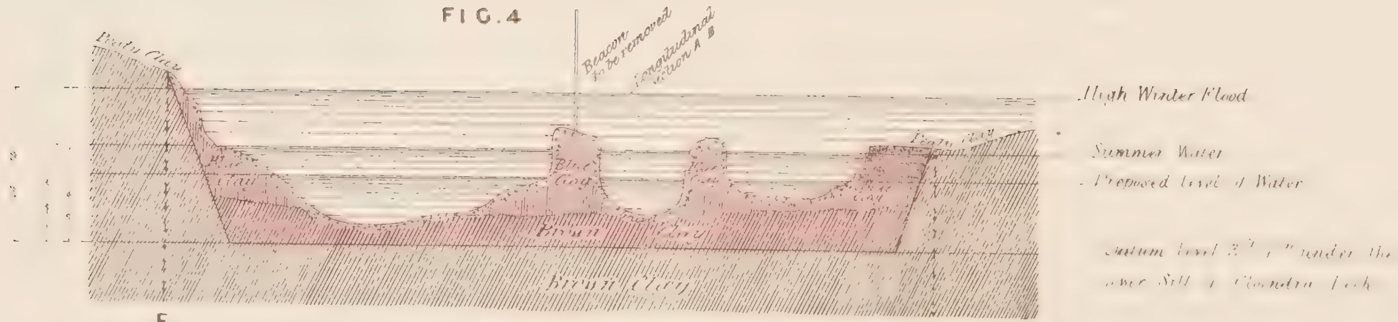
Fig 1 from A to B

FIG. 5



Transverse Section from G to H on Fig 1

FIG. 4



Transverse Section from E to F on Fig 1

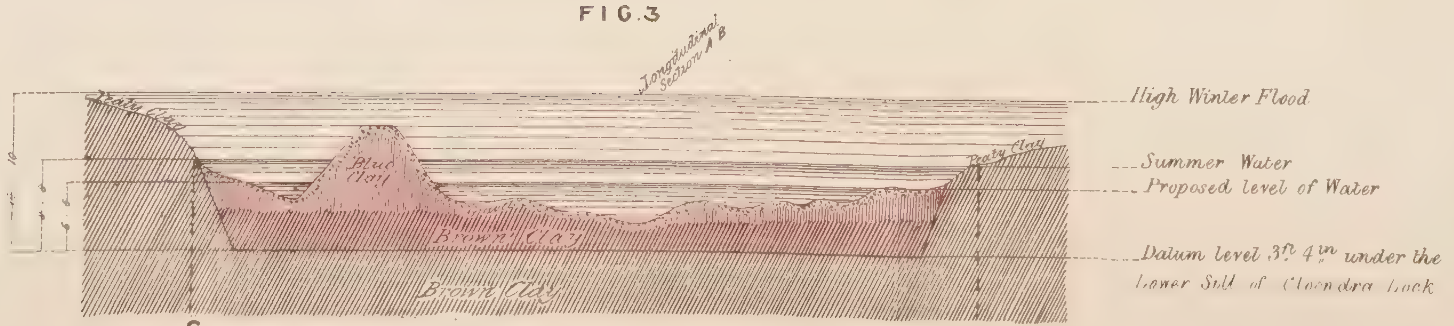
NOTE.

The Parts tinted Red on the Sections shew the required deepening

The Soundings are marked in feet and inches

The Mark thus ⊙ shews the site of the Borings.

FIG. 3



Transverse Section from C to D on Fig 1.

Standidge & Co. litho. London.

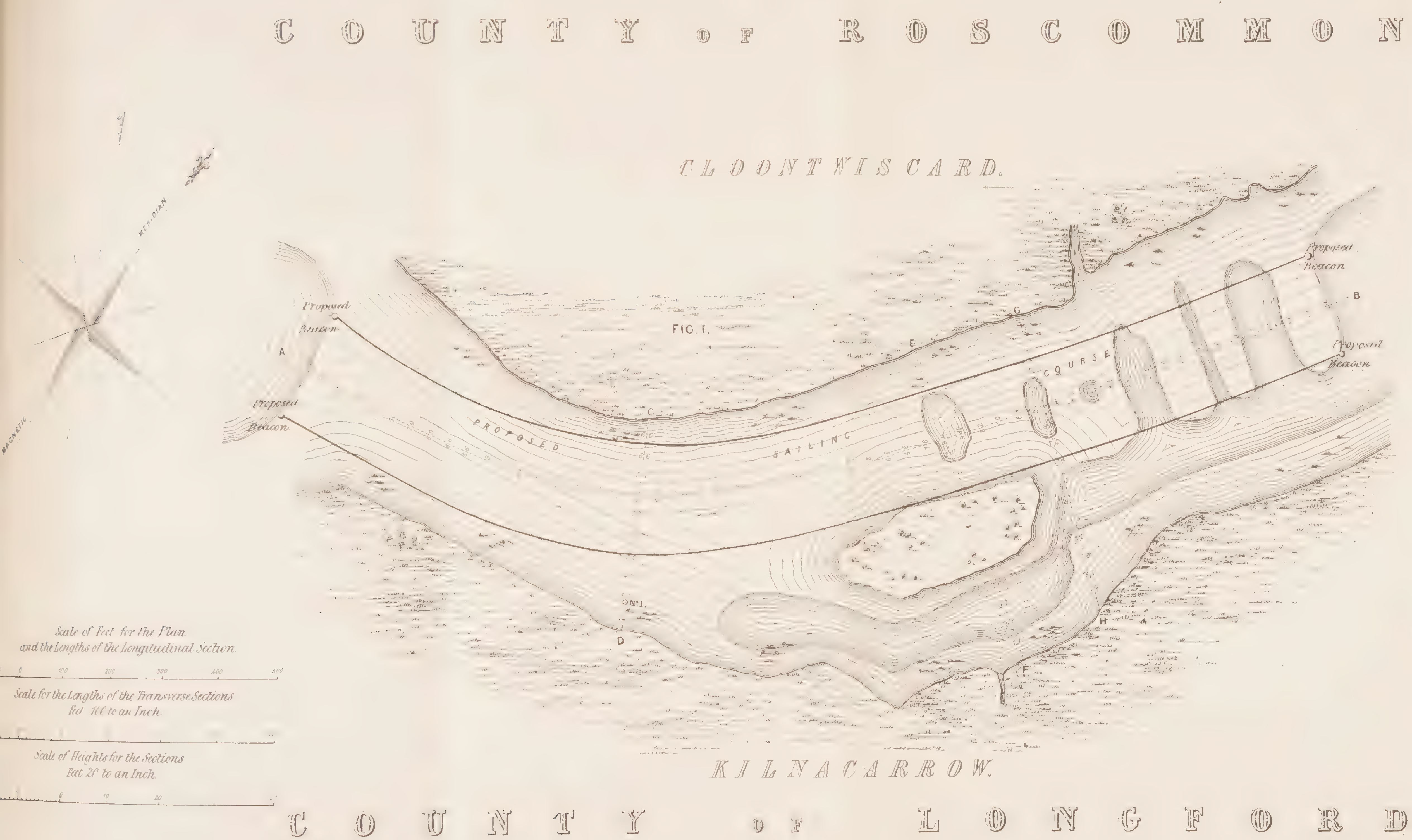
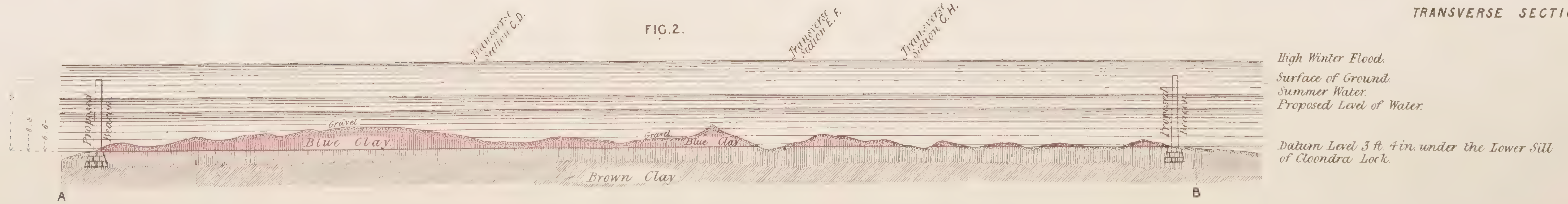
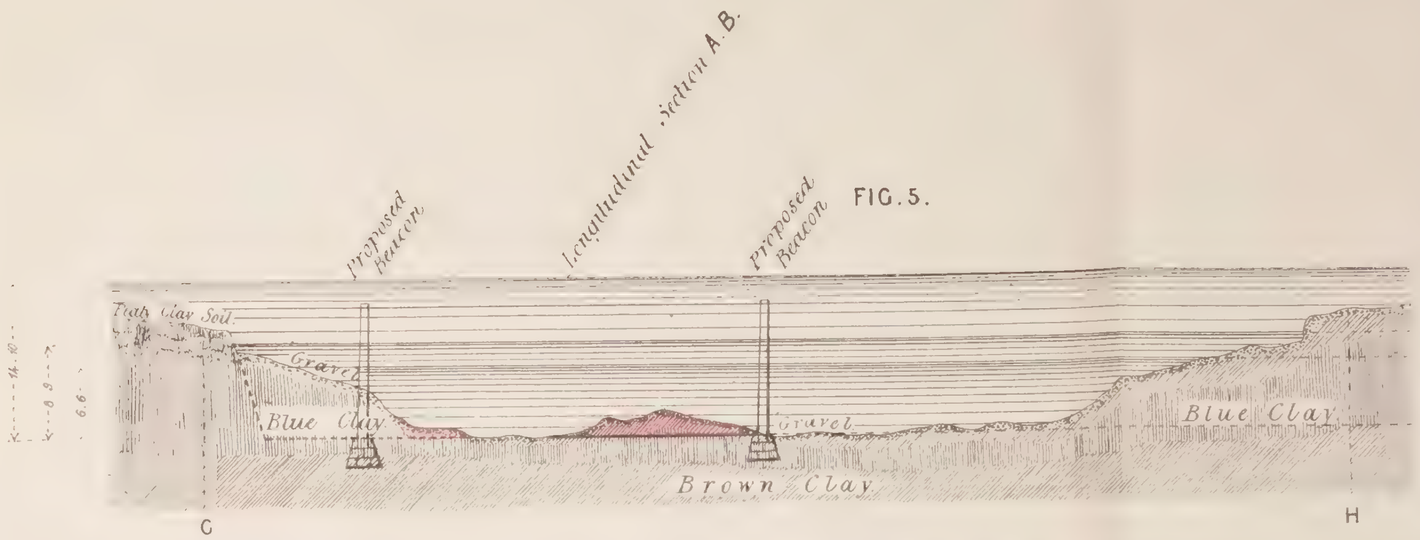


FIG. 2.



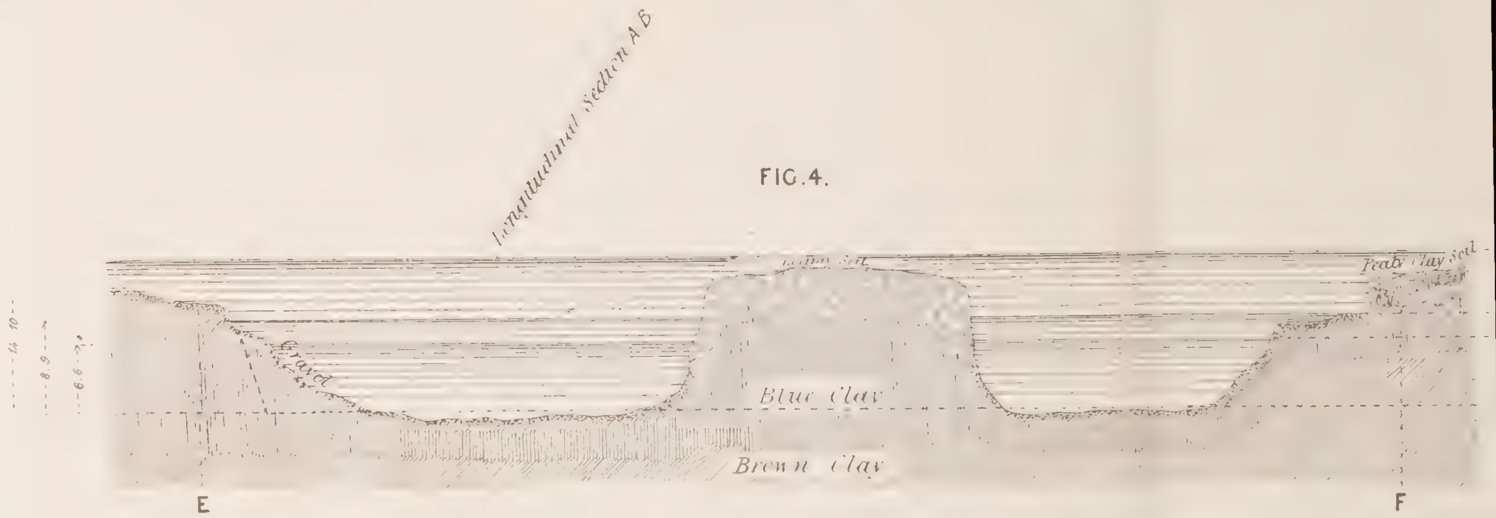
LONGITUDINAL SECTION FROM A TO B ON FIG I.

FIG. 5.



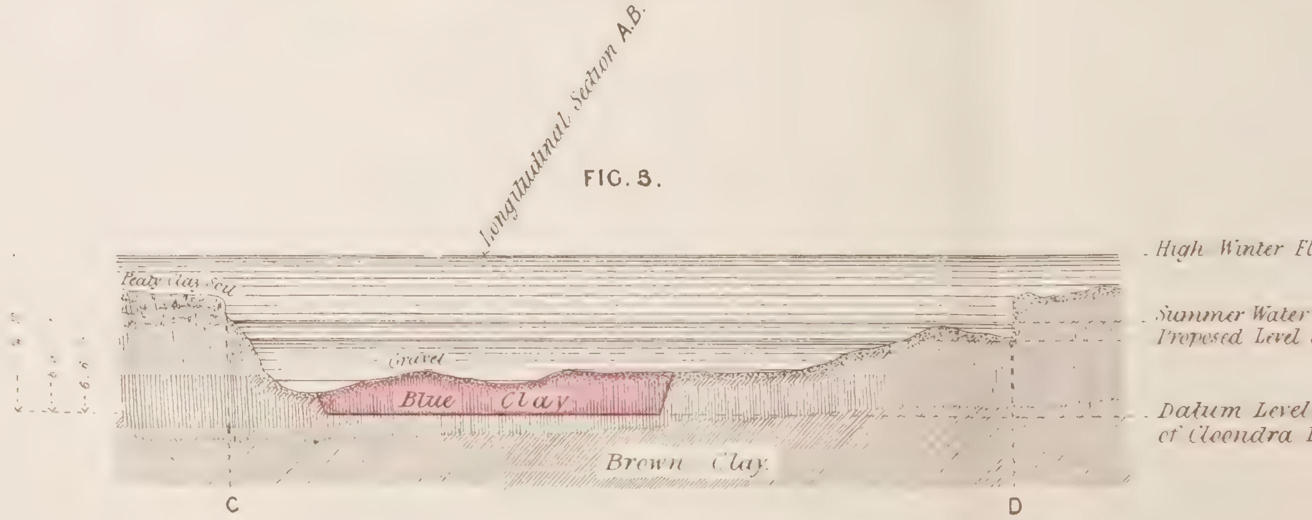
TRANSVERSE SECTION FROM G TO H ON FIG. I.

FIG. 4.

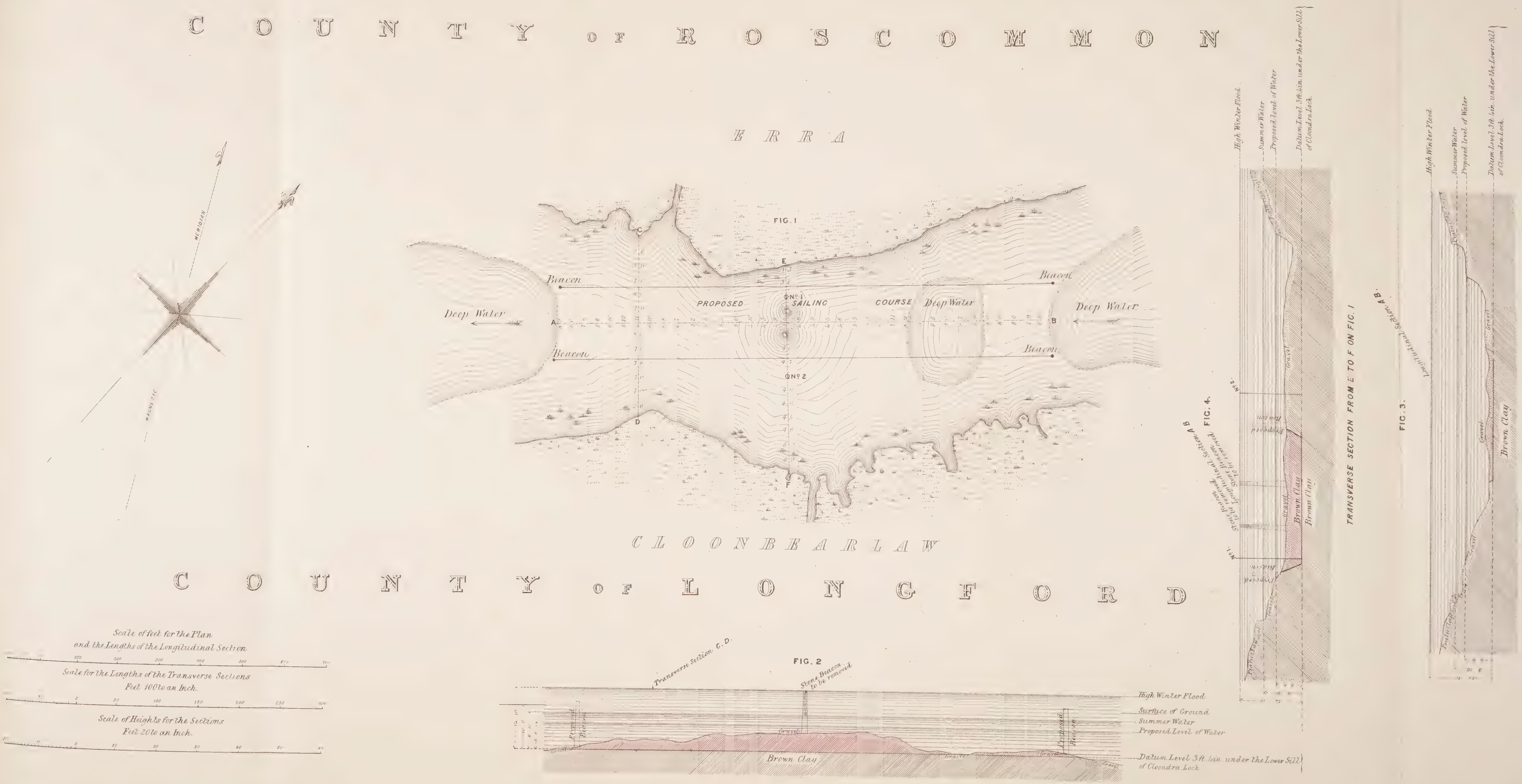


TRANSVERSE SECTION FROM E TO F ON FIG. I.

FIG. 3.



TRANSVERSE SECTION FROM C TO D ON FIG. I.


COUNTY OF ROSCOMMON
ERRA
FIG. 1
Beacon
Beacon
Deep Water
Deep Water
Deep Water
PROPOSED SAILING COURSE
Nº 1
Nº 2
Beacon
Beacon
A
B
C
D
E
F
MERIDIAN
MAGNETIC
CLOONBEARLAW
COUNTY OF LONGFORD
Scale of feet for the Plan and the Lengths of the Longitudinal Section
Scale for the Lengths of the Transverse Sections Feet 100 to an Inch.
Scale of Heights for the Sections Feet 20 to an Inch.
FIG. 2
Transverse Section C.D.
Stone Beacon to be removed
High Winter Flood
Surface of Ground
Summer Water
Proposed Level of Water
Datum Level 3 ft. 6 in. under the Lower Sill of Cloondra Lock
Brown Clay
Gravel
Proposed Beacon
LONGITUDINAL SECTION FROM A TO B ON FIG. I.
FIG. 4.
High Winter Flood
Summer Water
Proposed Level of Water
Datum Level 3 ft. 6 in. under the Lower Sill of Cloondra Lock.
Brown Clay
Gravel
TRANSVERSE SECTION FROM E TO F ON FIC. I
FIG. 3.
Longitudinal Section A B.
High Winter Flood
Summer Water
Proposed Level of Water
Datum Level 3 ft. 6 in. under the Lower Sill of Cloondra Lock.
Gravel
Brown Clay

Plan No. 23.

181

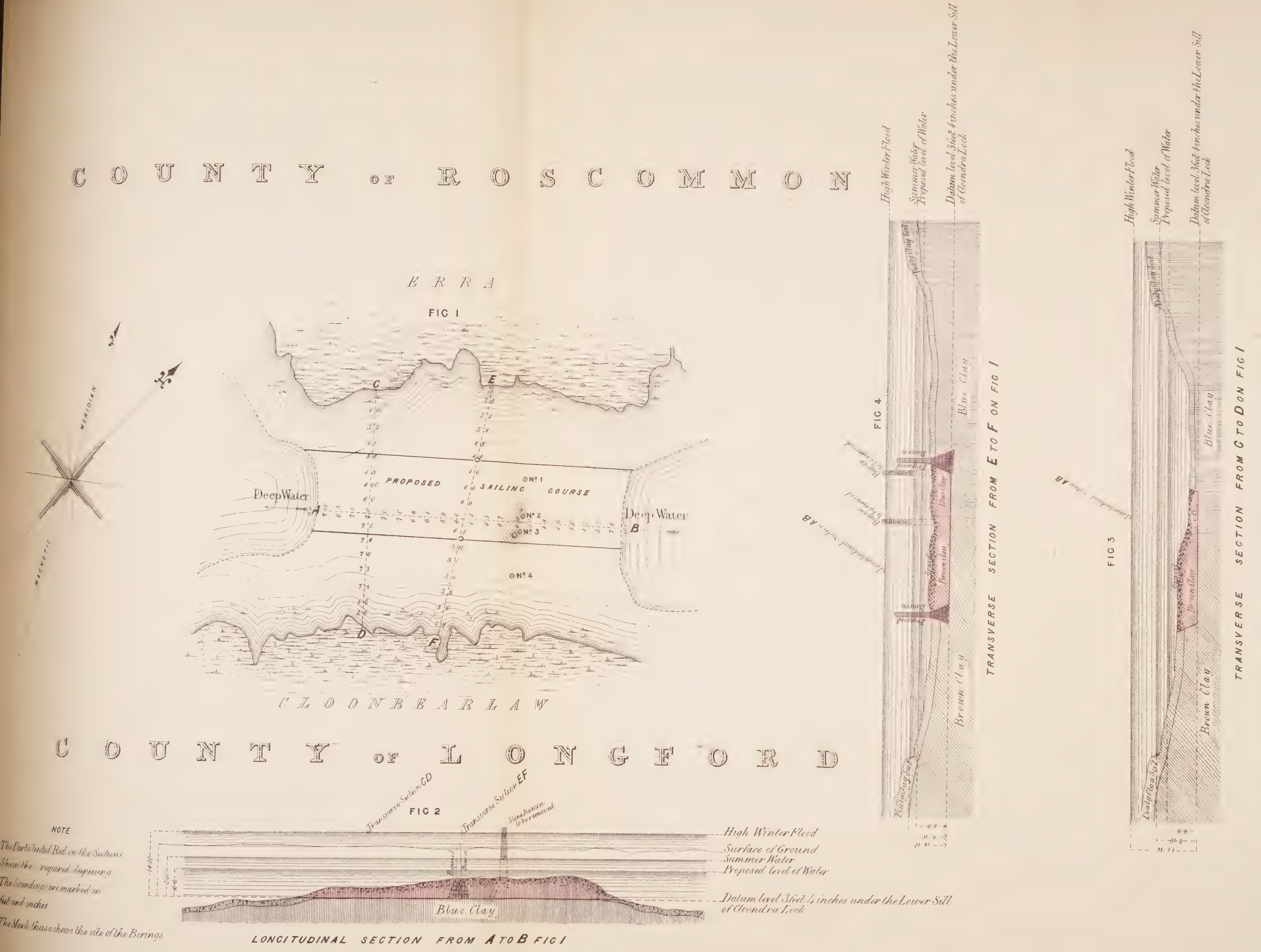
SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI W^M 4TH CAP 67.

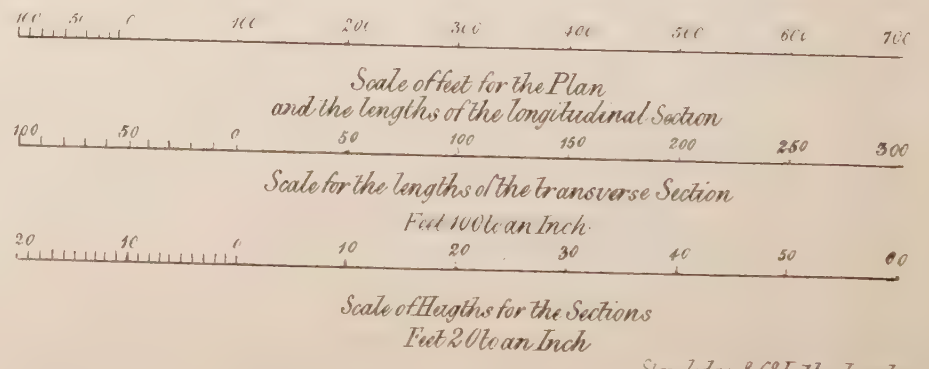
CLOONBEARLAW

PLAN AND SECTIONS
OF
SHOAL

1838.

CHARLES. TARRANT. SEN^R Civil Engineer.

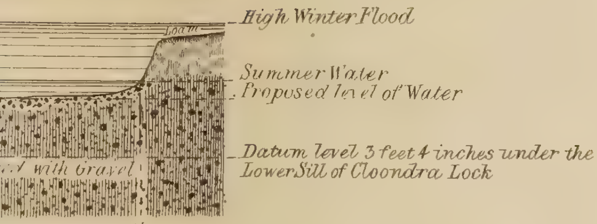




Standidge & Co Lithe London.

Pl. No. 24

183



ON FIG. 1. H

SURVEY
OF THE
RIVER SHANNON

UNDER THE ACT V & VI Wm 4th CAP 67.

LODGE CUT

PLAN AND SECTIONS
OF
SHOAL

1838.

CHARLES TARRANT SENr. Civil Engineer.

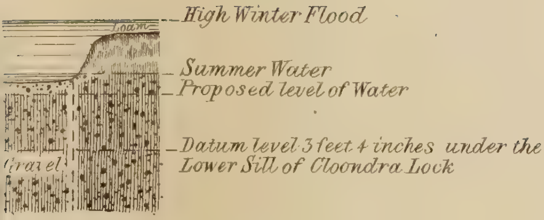


FIG. 1. F

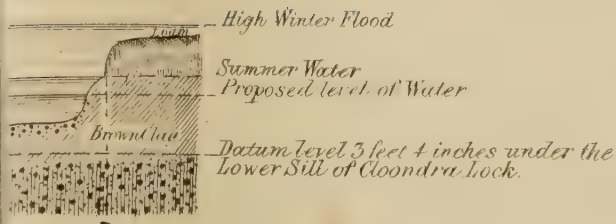


FIG. 1. D

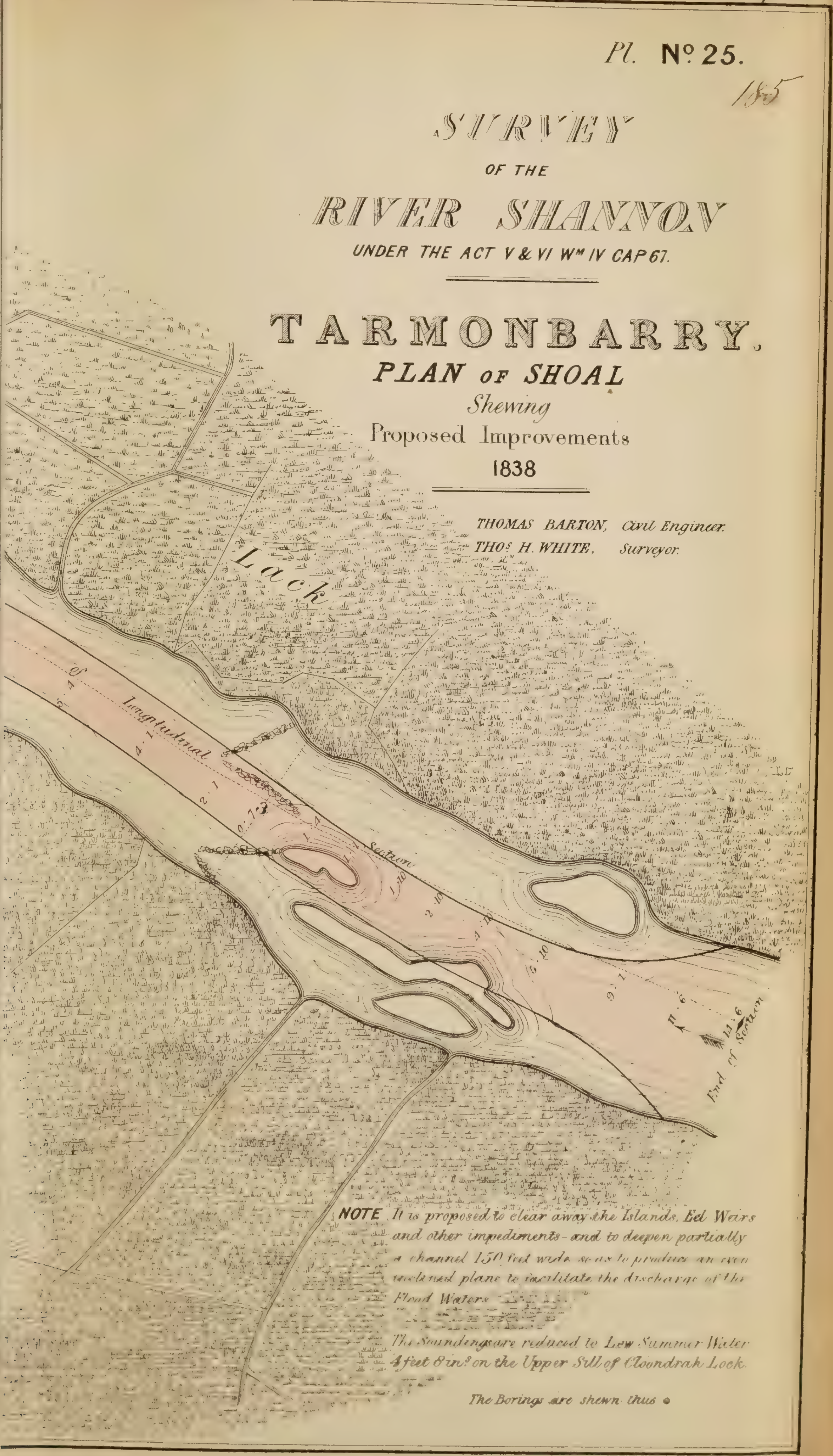
NOTE.

The parts tinted Red on the Sections shew the required deepening

The Soundings are marked in feet and inches

The Mark thus ∘ shews the Site of the Borings

Standidge & Co. Lithe. London



Standidge & Co litho 77 Cornhill

187

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm 4th CAP 67

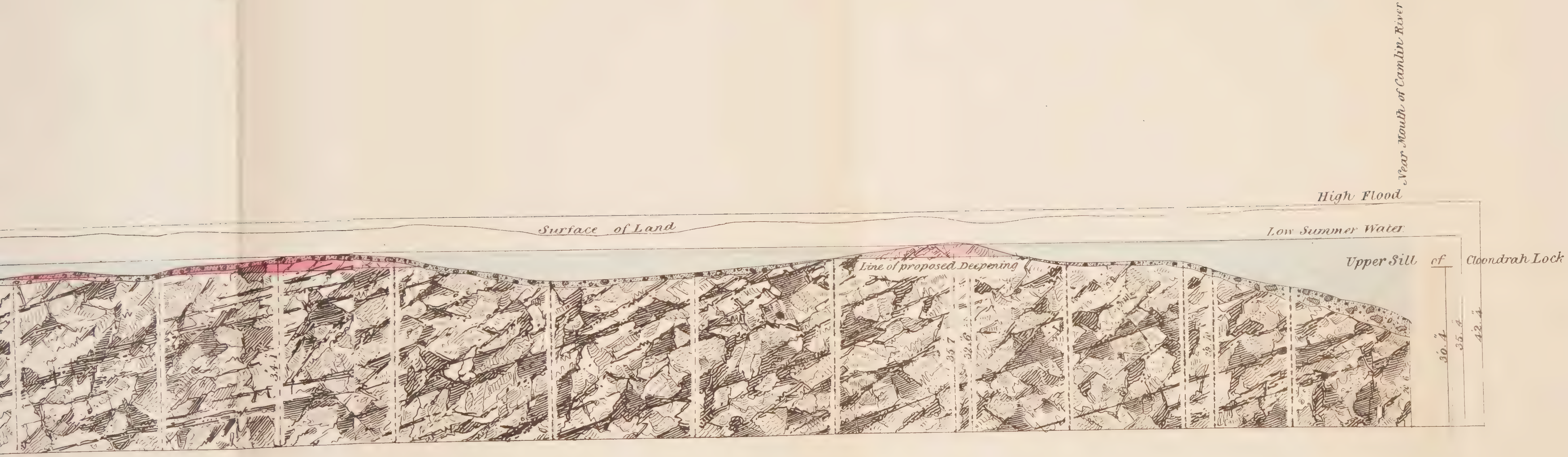
TARMONBARRY

COUNTY OF ROSCOMMON,

LONGITUDINAL SECTION
of
SHOAL

1838.

THOMAS BARTON, CIVIL ENGINEER.
JOHN TULLY, SURVEYOR.



Standidge & Co Litho London

Plan N°

SURVEY OF THE RIVER SHANNON

UNDER THE ACT V & VI Wm. IV. CAP. 67.

TARMONBARR

TRANSVERSE SECTION OF SHOAL

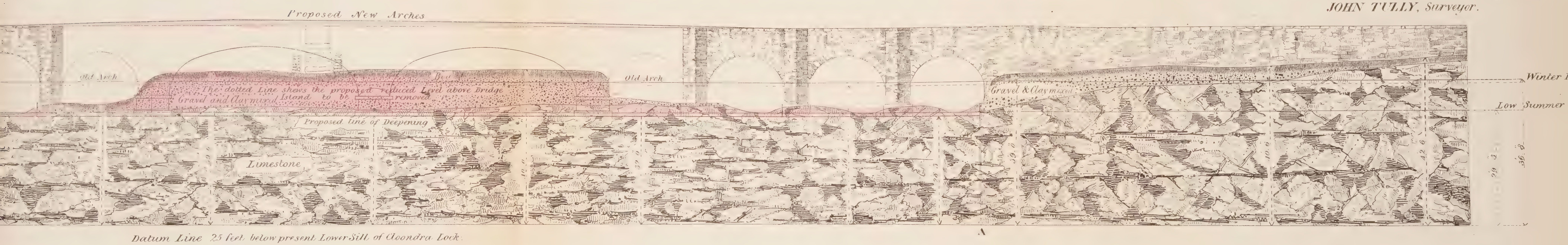
SHEWING THE BRIDGE.

1838.

See Plan of Shoal No. 25)

THOMAS BARTON, Civil Engineer.
JOHN TULLY, Surveyor.

N° 1 ON PLAN N° 25.



NOTE. It is proposed to construct Two New Arches in the Space at present occupied by the Island, and the present piers of the Bridge will be underpinned down to the proposed line of deepening.

Scale 20 feet to an Inch

20 30 40 50 60 70 80 90 100 200

Standidge & C° Lith

SURVEY OF THE RIVER SHANNON

UNDER THE ACT V. AND VI. Wm IV. CAP 67.

TARMONBARRY.

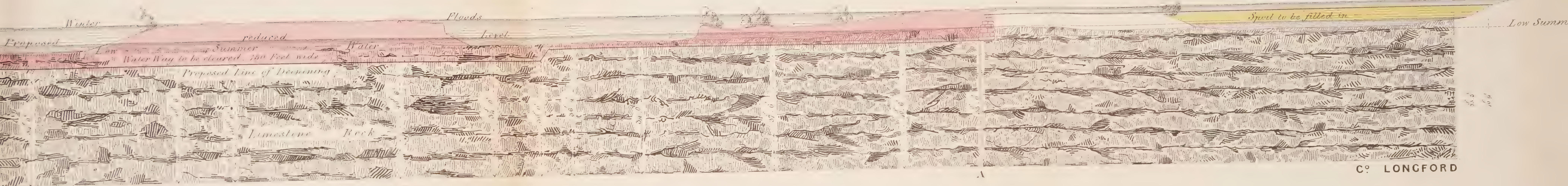
TRANSVERSE SECTIONS OF SHOAL

1838.

(See Plan of Shoal N° 25.)

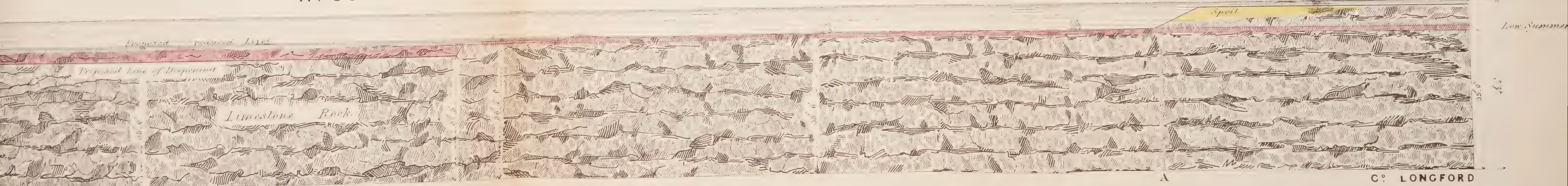
THOMAS BARTON. Civil Engineer.
JOHN TULLY. Surveyor

N° 2 ON PL. N° 25.



Datum Line 25 Feet below present Lower Sill of Cloondra Lock

N° 3 ON PL. N° 25.



Datum Line 25 Feet below present lower Sill of Cloondra Lock

Scale 20 Feet to an Inch

Standidge & Co.

Pl. N°. 29.

193

SURVEY OF THE RIVER SHANNON,

UNDER THE ACT V & VI. Wm. 4th CAP 67

CLOONDRA, COUNTY of LONGFORD

PLAN OF Proposed Improvements.

1838.

THOMAS BARTON, CIVIL ENGINEER.
THOMAS H. WHITE, SURVEYOR.

Scale of Feet

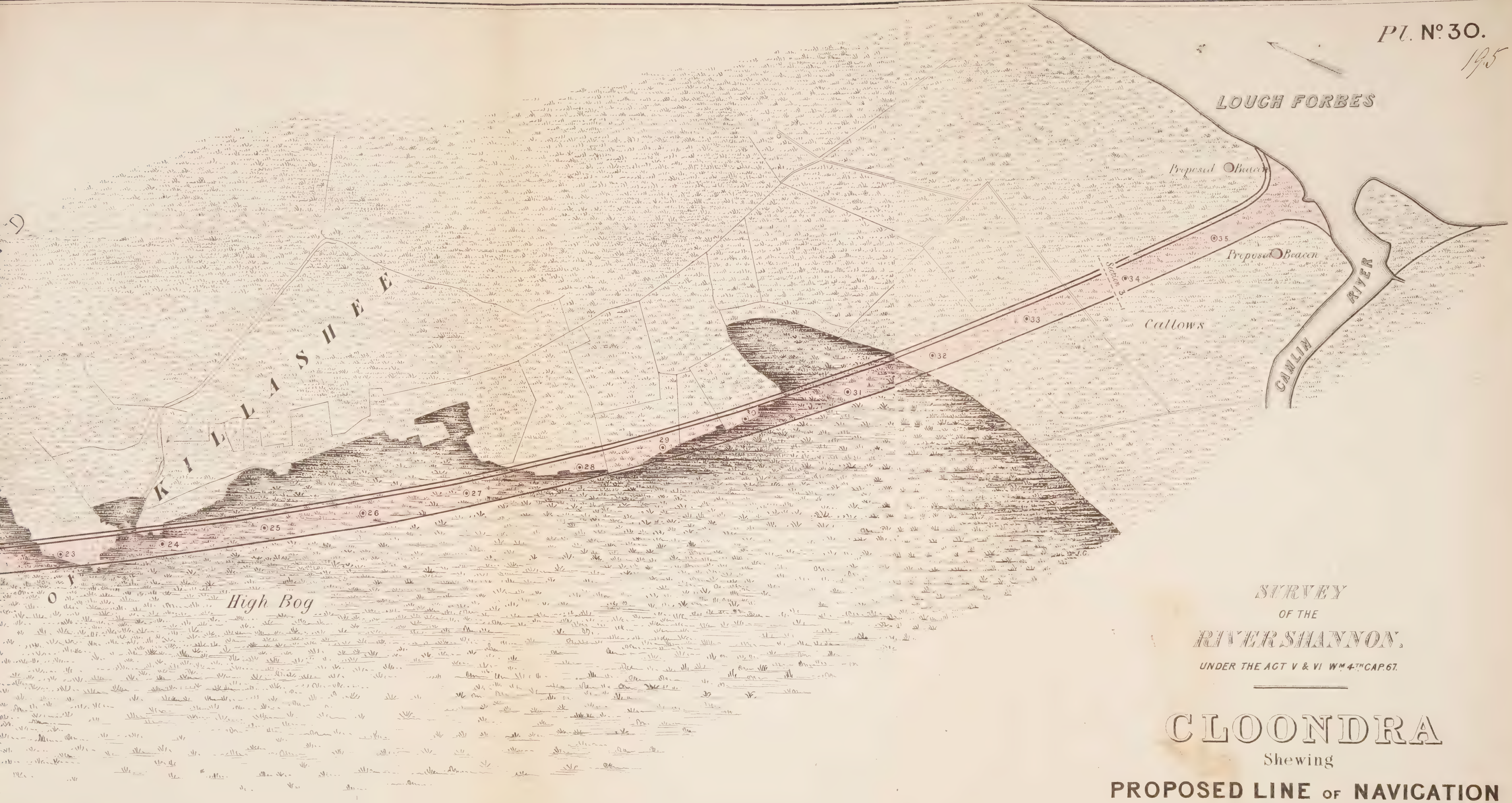
1000 500 0 1000 2000

Note._The proposed Improvements are tinted Red.

Standidge & Co. Litho London.

Pl. No. 30.

195



SURVEY
OF THE
RIVER SHANNON,
UNDER THE ACT V & VI WM. 4TH CAP. 67.

CLOONDRA
Shewing
PROPOSED LINE OF NAVIGATION
1838.

Scale of Feet.

100 50 0 100 200 300 400 500 600 700 800 900 1000 2000 Feet.

Note. The Sites of the Borings are described thus ⊙

THOMAS BARTON Civil Engineer.

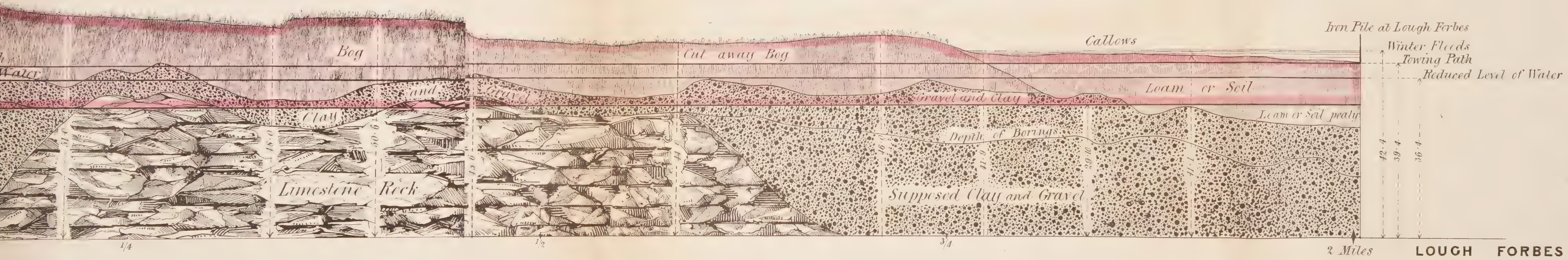
THOMAS H. WHITE Surveyor.

Standidge & Co. Litho: London

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V. & VI. W^M IVTH CAP. 67.

CLOONDRAH
LONGITUDINAL SECTION
of
PROPOSED NAVIGATION
1838.

THOMAS BARTON Civil Engineer.
THOMAS H. WHITE Surveyor.



3000 Feet

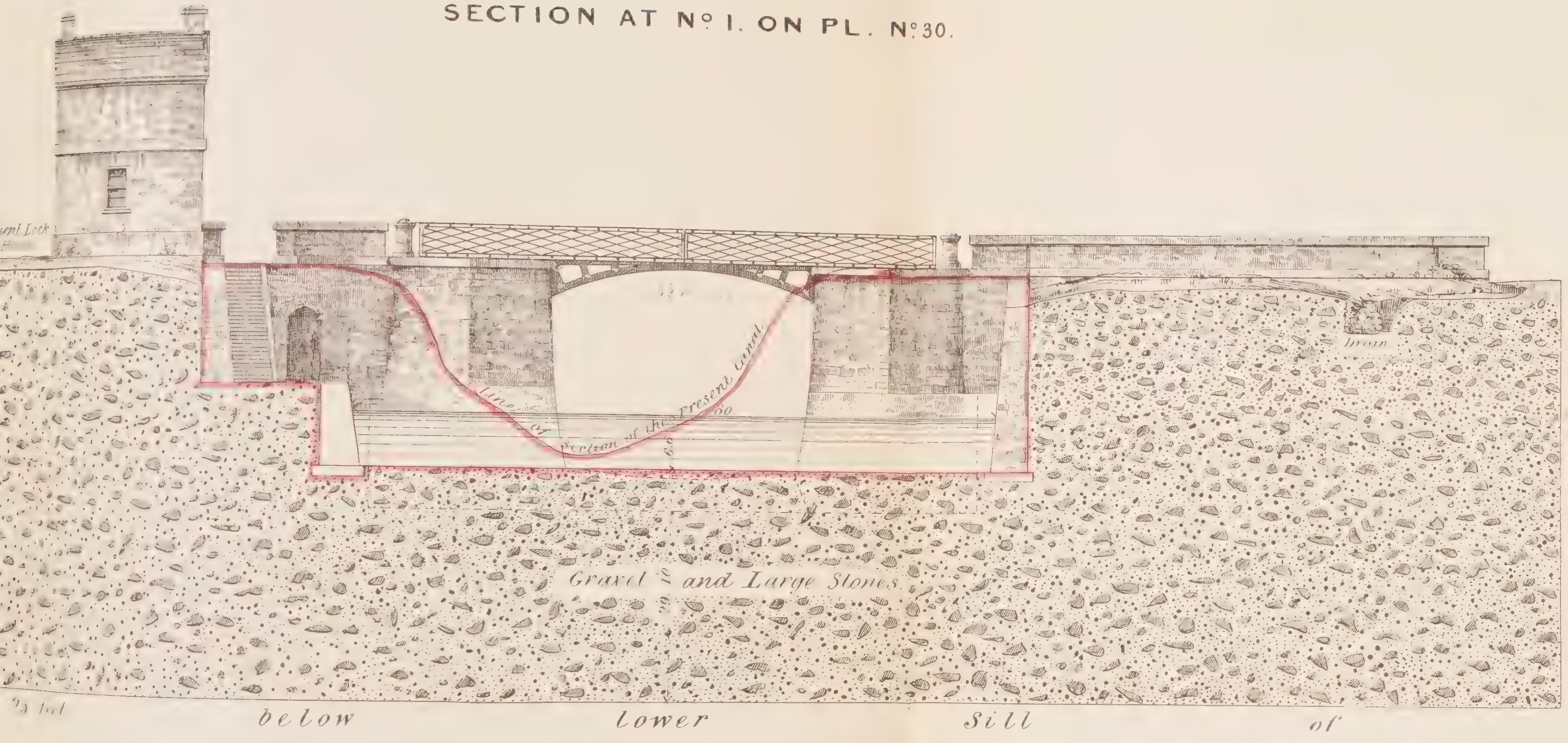
Standidge & C.° L

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm 4th CAP. 67.

CLOONDRAH
TRANSVERSE SECTIONS
OF
PROPOSED NAVIGATION
1838

THOMAS BARTON, Civil Engineer
THOMAS H. WHITE, Surveyor

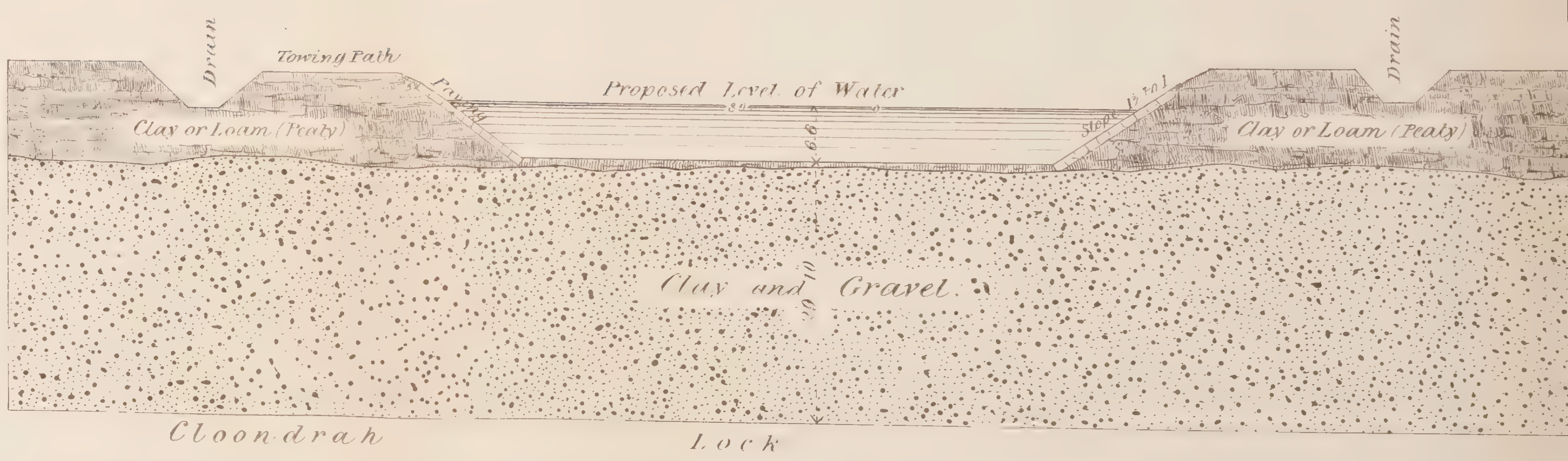
SECTION AT No. 1. ON PL. No. 30.



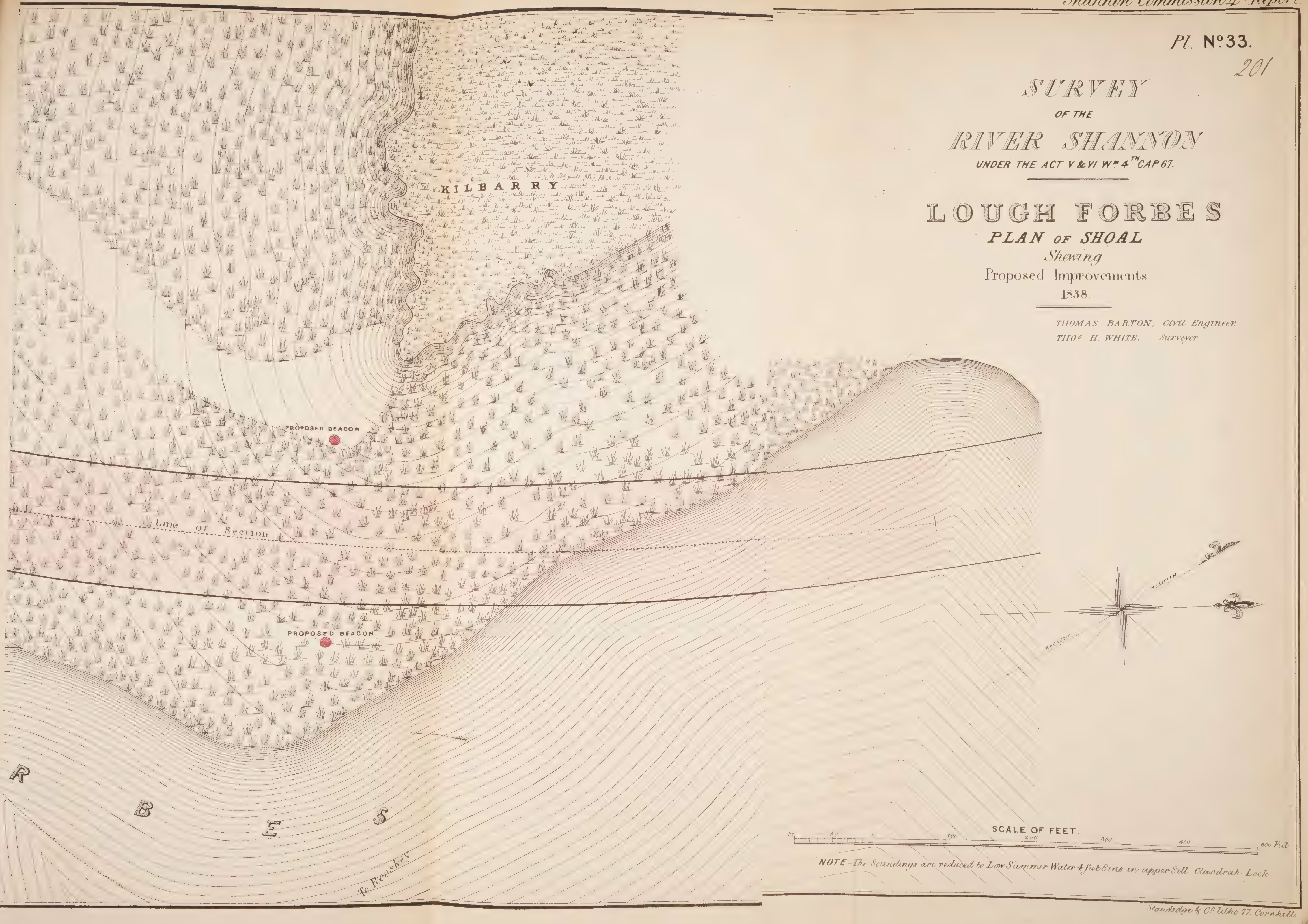
This Section shews the Swivel Bridge proposed to be erected at the Road from Longford to Strokestown, near the present Lock House.

Scale of Feet.
10 5 0 10 20 30 40 50 60 70 80 90 100 feet

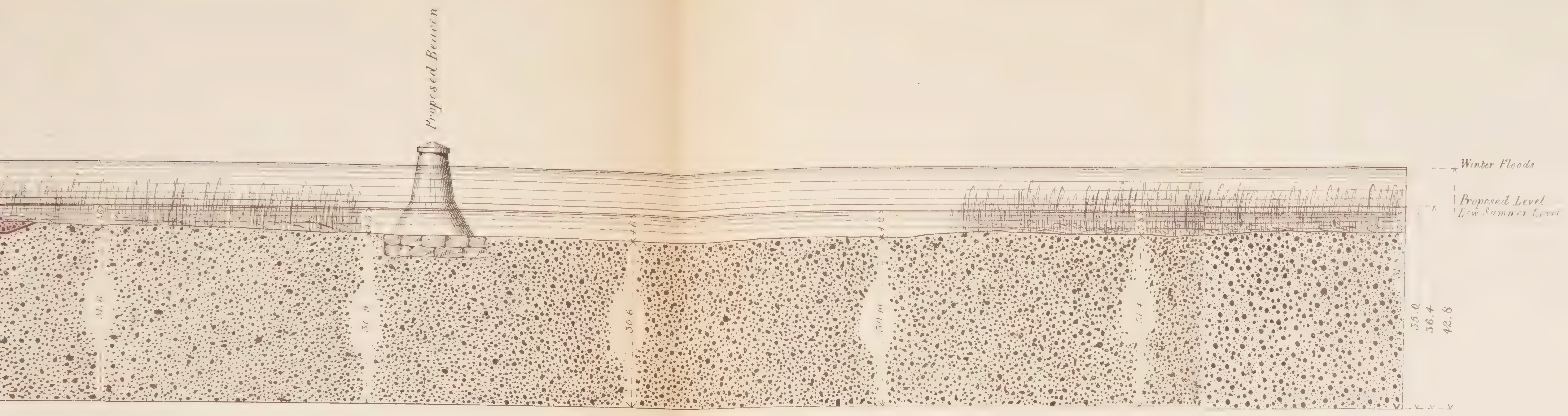
SECTION AT No. 3. ON PL. No. 30.

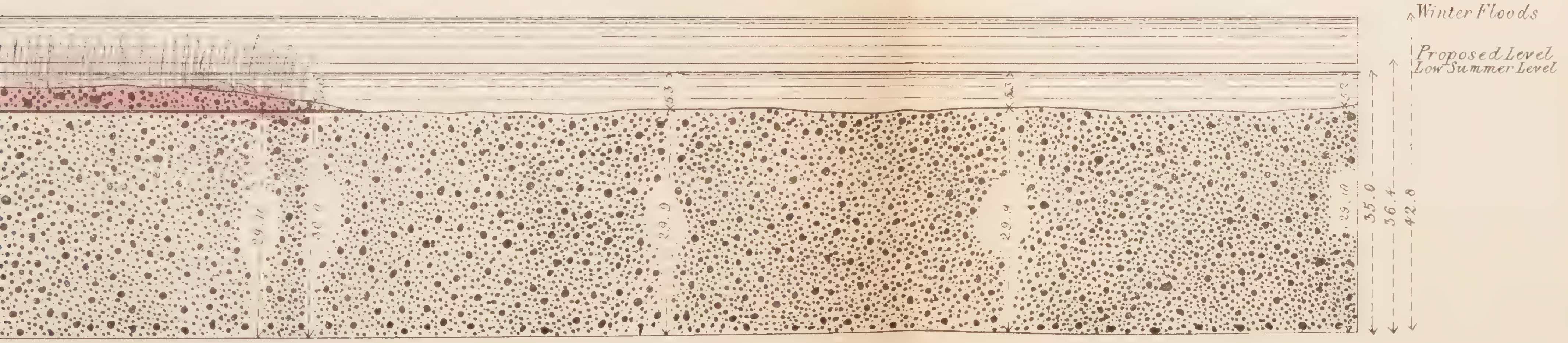


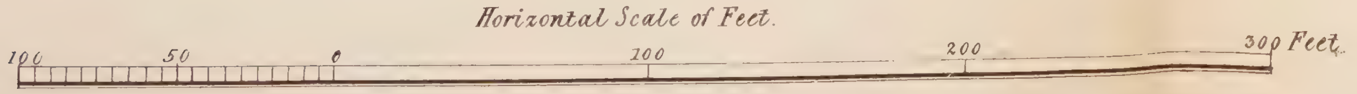
Standidge & Co. litho Lon


Pl. No. 33.
201
SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm 4TH CAP 67.
LOUGH FORBES
PLAN OF SHOAL
Shewing
Proposed Improvements
1838.
THOMAS BARTON, Civil Engineer.
THOs H. WHITE, Surveyor.
KILBARRY
PROPOSED BEACON
Line of Section
PROPOSED BEACON
R B E S
To Rooskey
MERIDIAN
MAGNETIC
SCALE OF FEET.
100
200
300
400
500 Feet
NOTE - The Soundings are reduced to Low Summer Water 4 feet 8 ins in upper Sill - Cloondrah Lock.
Standidge & Co litho 71. Cornhill.

Pl. No. 34.
203







SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI WM 4TH CAP. 67.

LOUGH FORBES

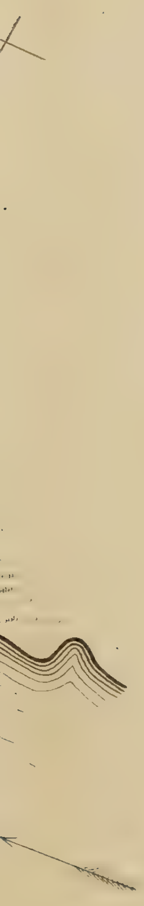
TRANSVERSE AND LONGITUDINAL
SECTIONS OF SHOAL
Shewing
PROPOSED IMPROVEMENTS
1838.

THOMAS BARTON Civil Engineer
THOMAS H. WHITE Surveyor

Standidge & Co. Litho. London

Pl. No. 35

205



SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm. IV CAP 67.

CLOONEEN COX
AND
CLOONFAD
PLAN OF SHOAL
Shewing
Proposed Improvements
1838

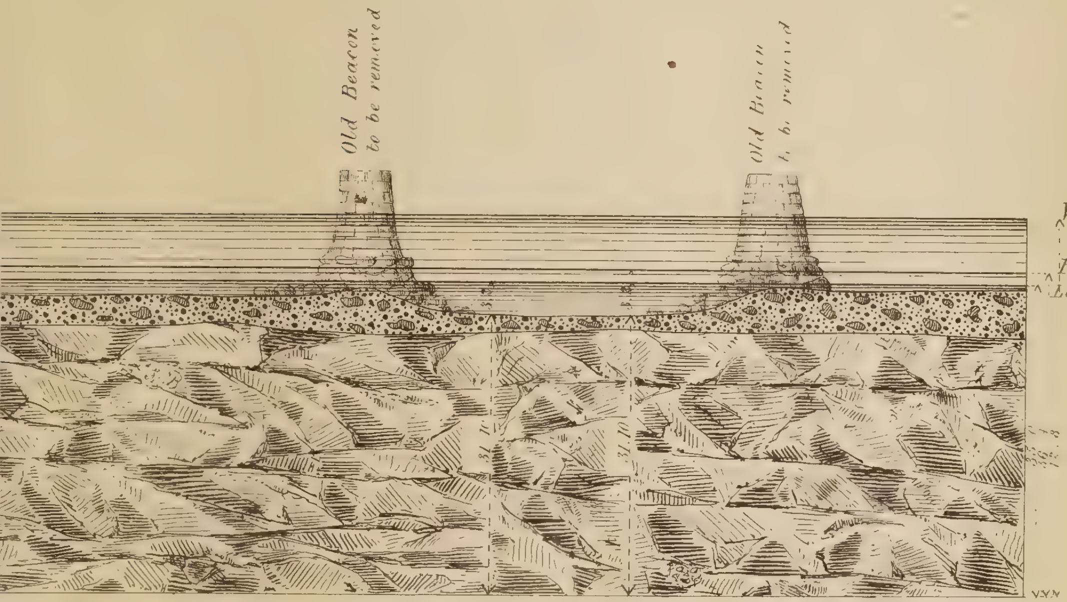
THOMAS BARTON, Civil Engineer.
THOS. H. WHITE, Surveyor.

Note, The Borings are described thus ●

Standidge & Co. Litho. London

Pl. No. 36

207



Co. LONGFORD

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm. IV CAP 67

CLOONEEN COX
TRANSVERSE SECTIONS
of
SHOAL
Shewing Proposed Improvements

1838.

THOMAS BARTON, Civil Engineer

Standidge & C[illegible] London

Pl. N° 37.

209

SECTION AT N° 3 ON PL. N° 35.

SECTION AT N° 4 ON PL. N° 35.

SURVEY
OF THE
RIVER SHANNON,
UNDER THE ACT V & VI W^{m} 4th CAP. 67.

CLOONFAD
TRANSVERSE SECTIONS
OF
SHOAL.
1838.

THOMAS BARTON, Civil Engineer.
THO^{s} H. WHITE, Surveyor.

Scale of Feet.

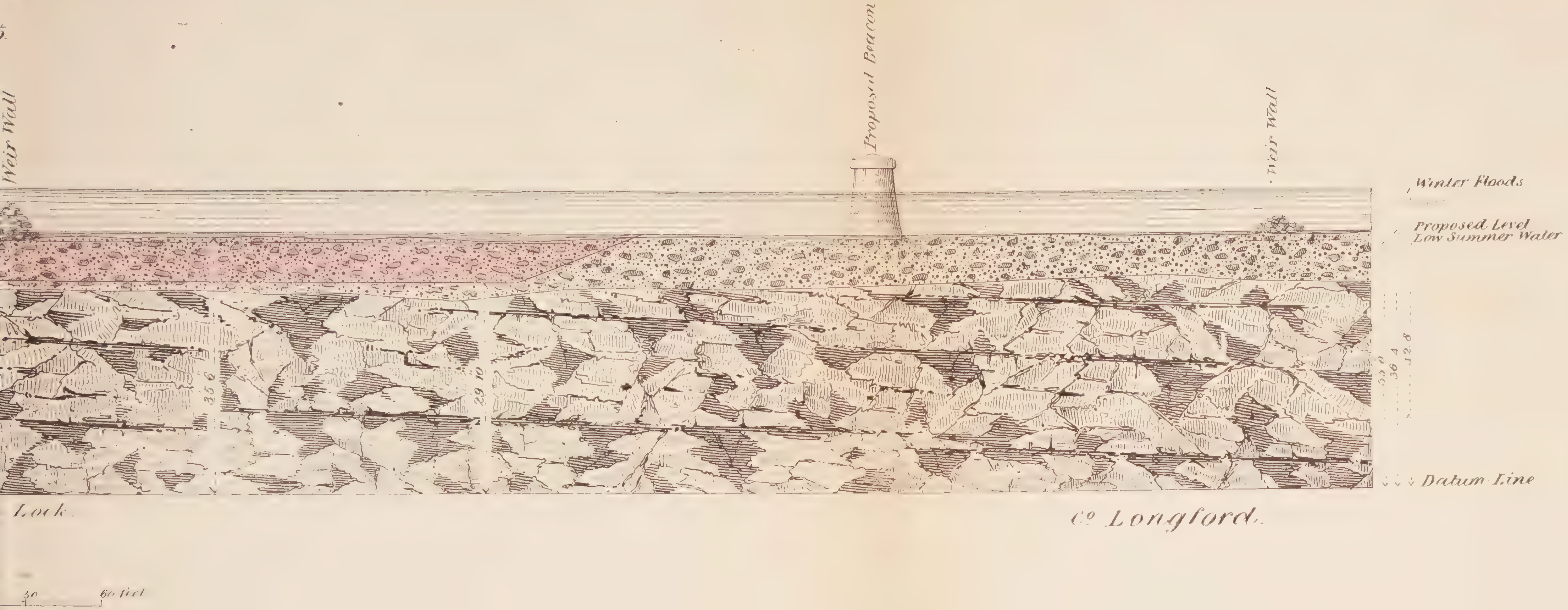
10 20 30 40 50 60 70 80 90 100 Feet

Standidge & C° Litho, London.

Pl. No. 38.

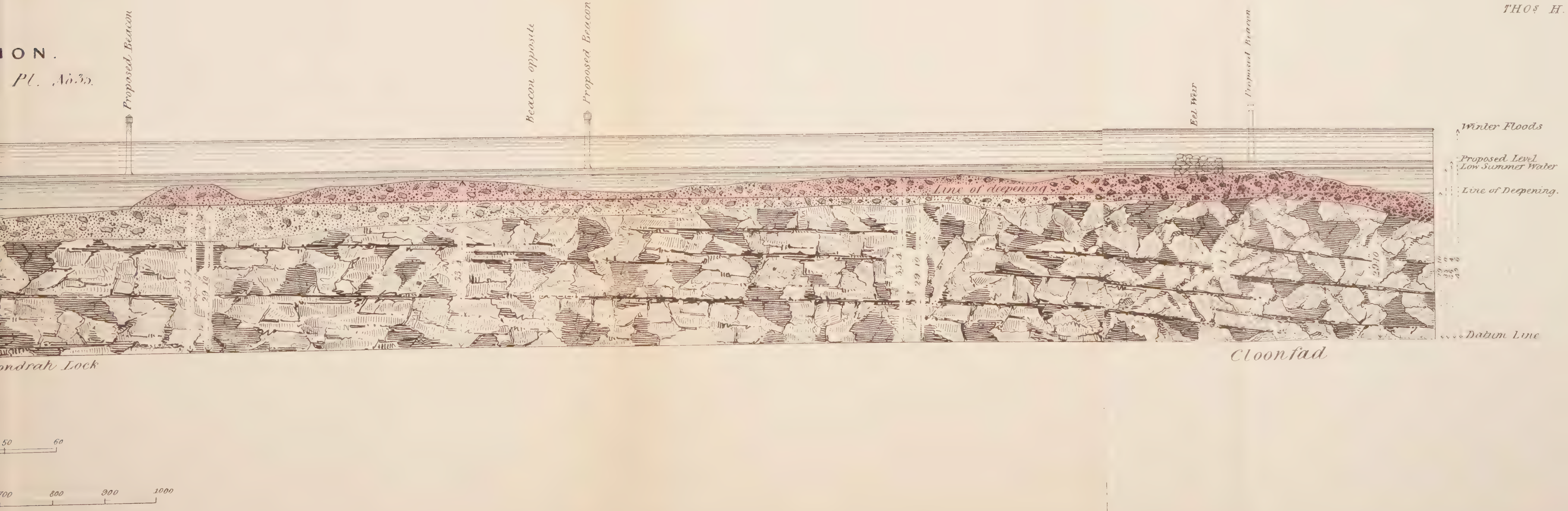
211

ON.



ION.

Pl. No.35.

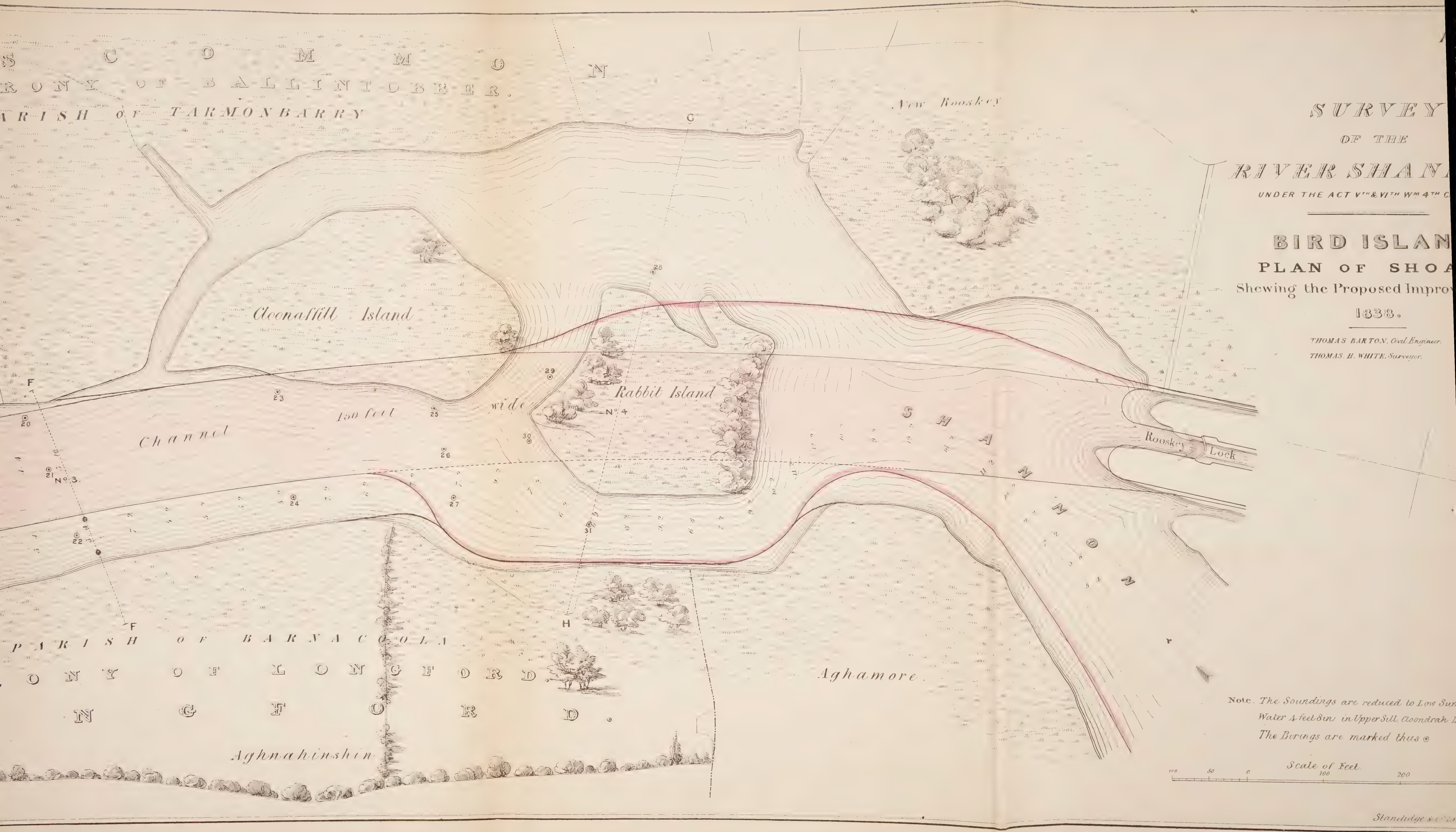


SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm IV. CAP. 67.

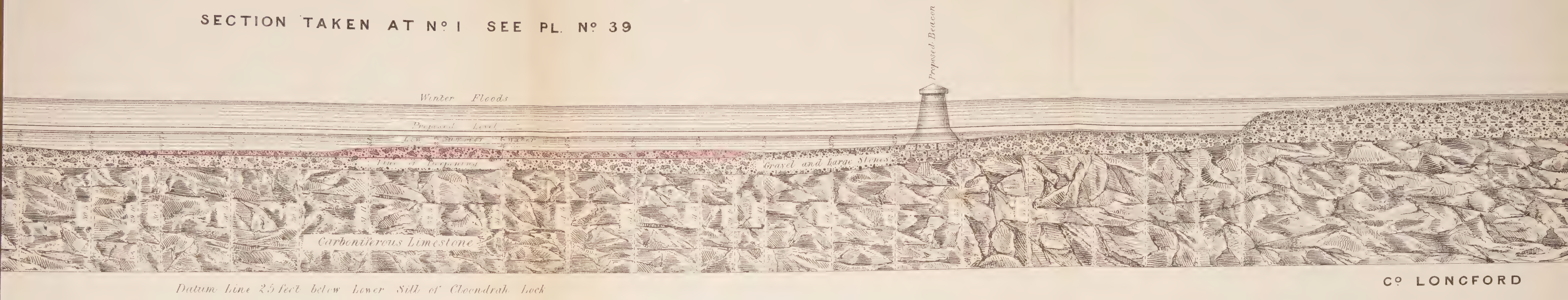
CLOONEEN COX
AND
CLOONFAD
SECTIONS OF SHOAL
Shewing
Proposed Improvements.
1838.

THOMAS BARTON, Civil Engineer.
THOS H. WHITE, Surveyor.

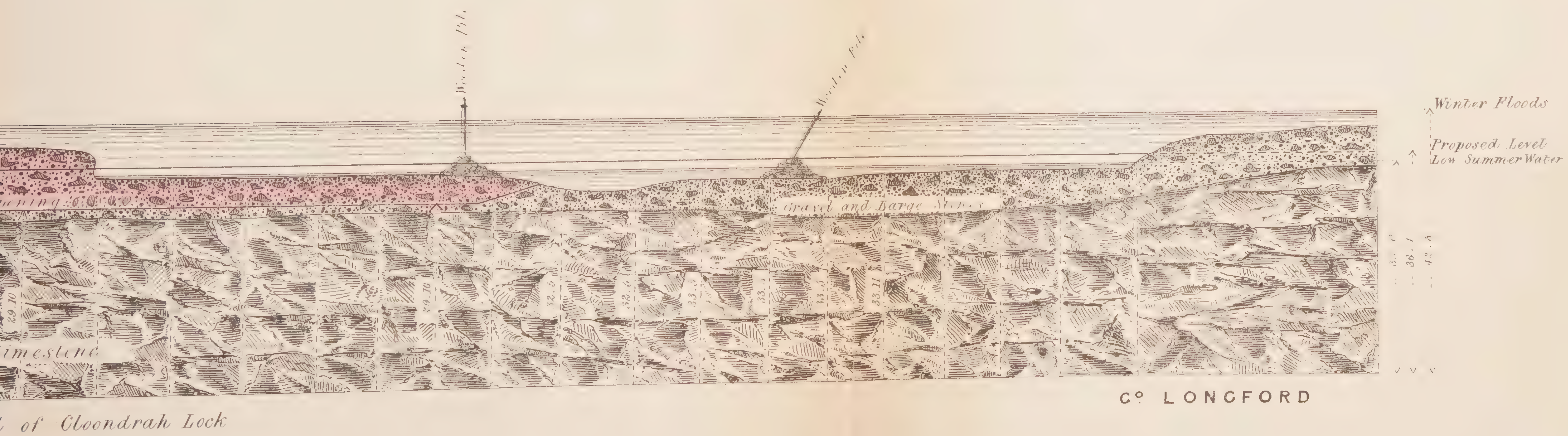
Standidge & Co Litho. London.


SURVEY
OF THE
RIVER SHAN
UNDER THE ACT Vth & VIth Wm 4th C
BIRD ISLAN
PLAN OF SHOA
Shewing the Proposed Improv
1838.
THOMAS BARTON, Civil Engineer.
THOMAS. H. WHITE, Surveyor.
C O M M O N
RONY OF BALLINTOBBER.
ARISH OF TARMONBARRY
New Roosky
Cloonaffill Island
Rabbit Island
No 4
No 3.
150 feet wide
Channel
SHANNON
Roosky Lock
PARISH OF BARNACOOLA.
ONY OF LONGFORD.
N G F O R D.
Aghamore.
Aghnahinshin
Note. The Soundings are reduced to Low Sum
Water 4 feet 8in: in Upper Sill, Cloondrah L
The Borings are marked thus ⊙
Scale of Feet.
100 50 0 100 200
Standidge & Co

SECTION TAKEN AT No. I SEE PL. No. 39



T No. 2 SEE PL No. 39



SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI W.M IV CAP 67

BIRD ISLAND
TRANSVERSE SECTIONS
of
SHOAL
Shewing Proposed Improvements
1838

THOMAS BARTON, Civil Engineer.
THOMAS H. WHITE, Surveyor.

Scale of Feet

50 40 30 20 10 0 50 100

Standidge & Co. Lit.

Pl. No. 41.

217

SURVEY

OF THE

RIVER SHANNON

UNDER THE ACT V & VI Wm. 4th. CAP 67.

BIRD ISLAND

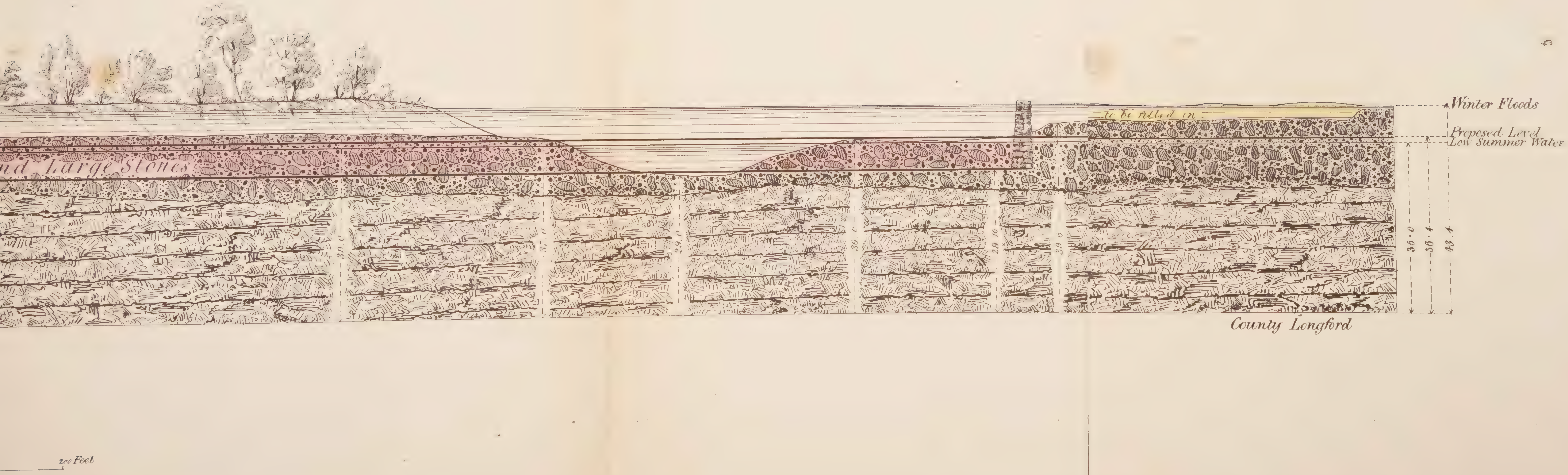
TRANSVERSE SECTIONS

OF

SHOAL

1838.

THOMAS BARTON Civil Engineer.
THOMAS H. WHITE Surveyor.



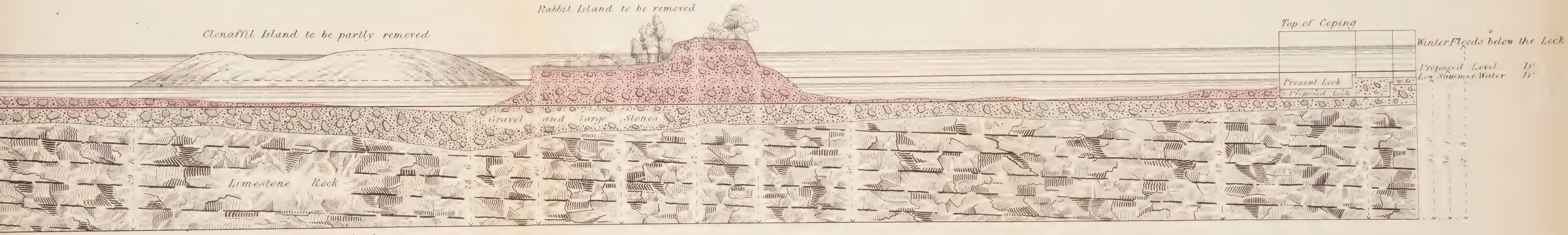
Standidge & Co. Lith. London.

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm IV CAP 67

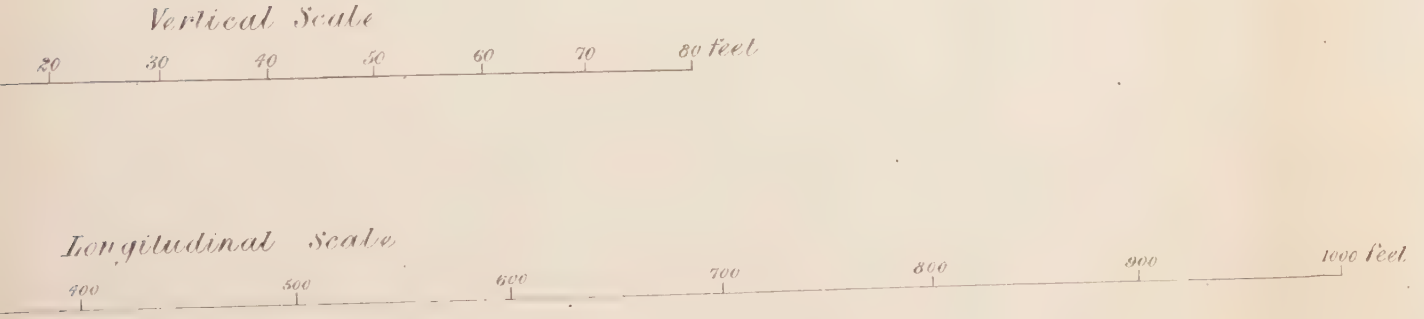
BIRD ISLAND
LONGITUDINAL SECTION
OF
SHOAL
Shewing Proposed Improvements
1838

THOMAS BARTON, Civil Engineer.

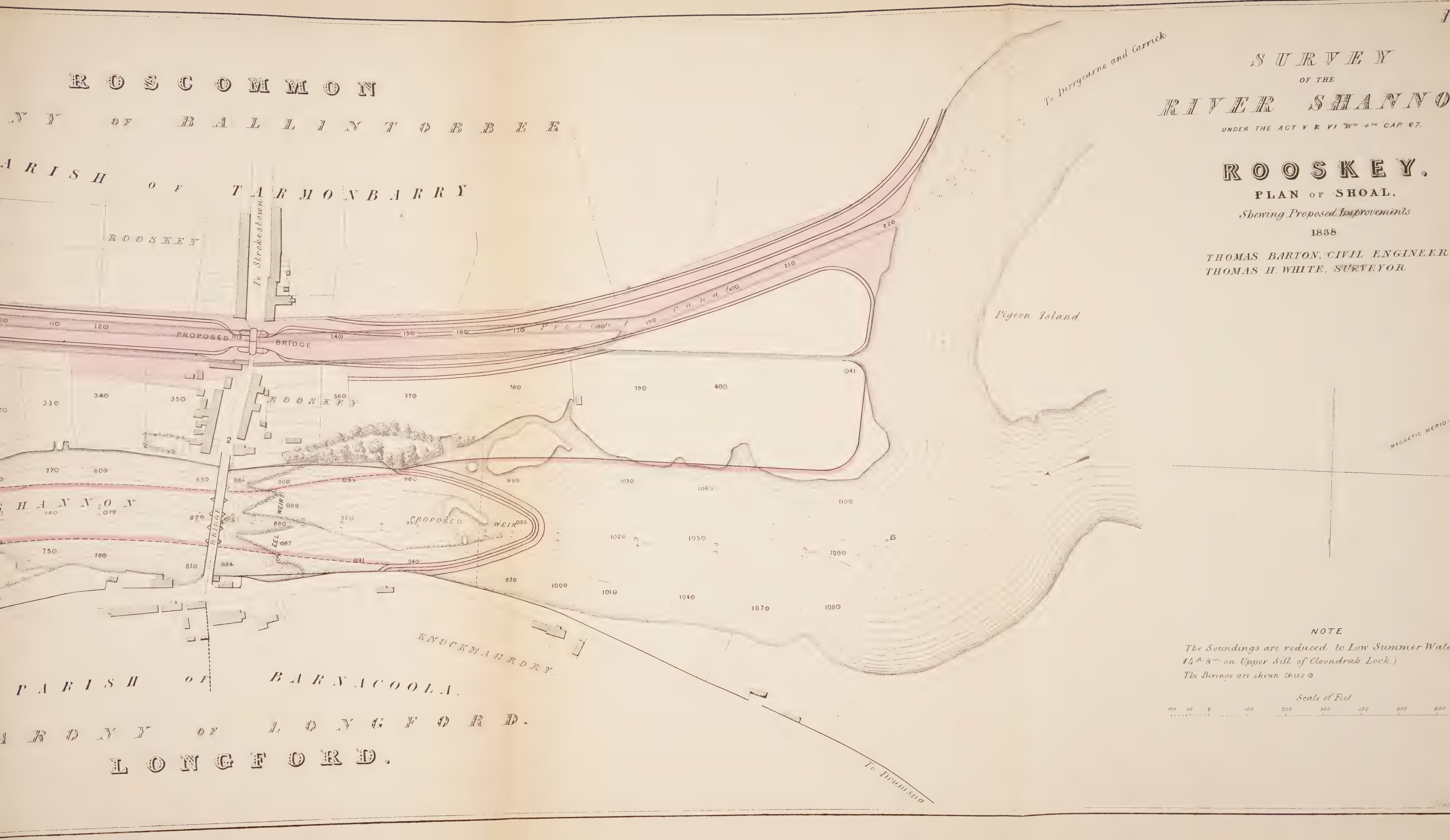
L SECTION SEE PL. Nº 39



m Line 25 feet below Lower Sill of Cloondrah Lock



Standidge & Co Lithog. London.


SURVEY
OF THE
UNDER THE ACT V & VI Wm 4th CAP. 67.
ROOSKEY.
PLAN OF SHOAL,
Shewing Proposed Improvements
1838
THOMAS BARTON, CIVIL ENGINEER
THOMAS H. WHITE, SURVEYOR
ROSCOMMON
BALLINTOBBER
TARMONBARRY
ROOSKEY
To Strokestown
PROPOSED
BRIDGE
Present Canal
To Derrycarne and Carrick
Pigeon Island
ROOSKEY
BRIDGE
EEL WEIRS
PROPOSED WEIR
KNOCKMAGRORY
PARISH OF BARNACOOLA.
LONGFORD.
LONGFORD.
To Drumsna
NOTE
The Soundings are reduced to Low Summer Water
14ft. 8in. on Upper Sill of Cloondrab Lock.)
The Borings are shown thus ⊙
Scale of Feet
100 50 0 100 200 300 400 500 600

Pl. No 44.

223

SURVEY OF THE RIVER SHANNON

UNDER THE ACT Vth & VIth Wm IV. CAP 67.

ROOSKEY

TRANSVERSE SECTION OF SHOAL

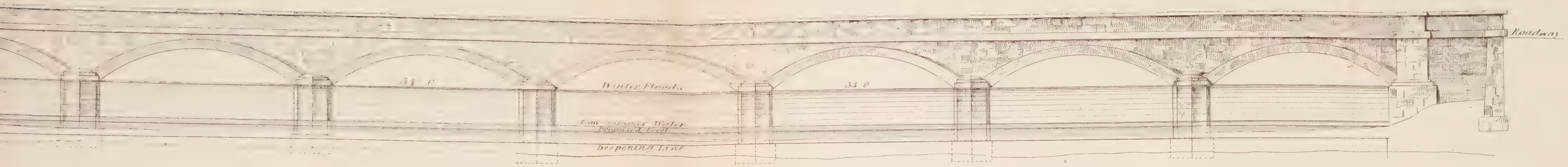
Shewing Proposed Improvements.

1838.

THOMAS BARTON, Civil Engineer.
THOs H WHITE, Surveyor.

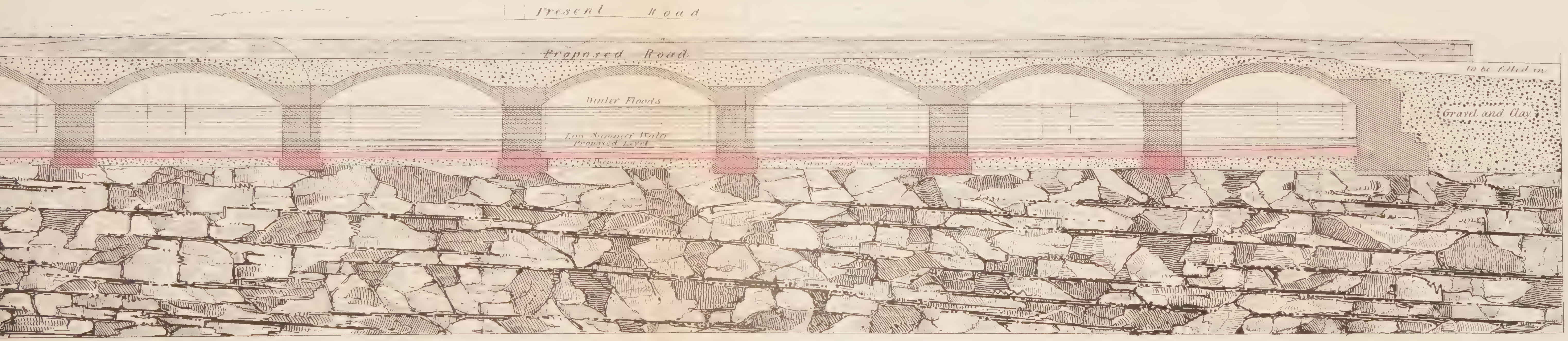
...NTRE OF THE BRIDGE OVER THE SHANNON. See Pl. No 45.

PROPOSED BRIDGE.



ELEVATION OF LOWER FACE

Note. In this Bridge the Capacity or Waterway will be increased 30 feet.

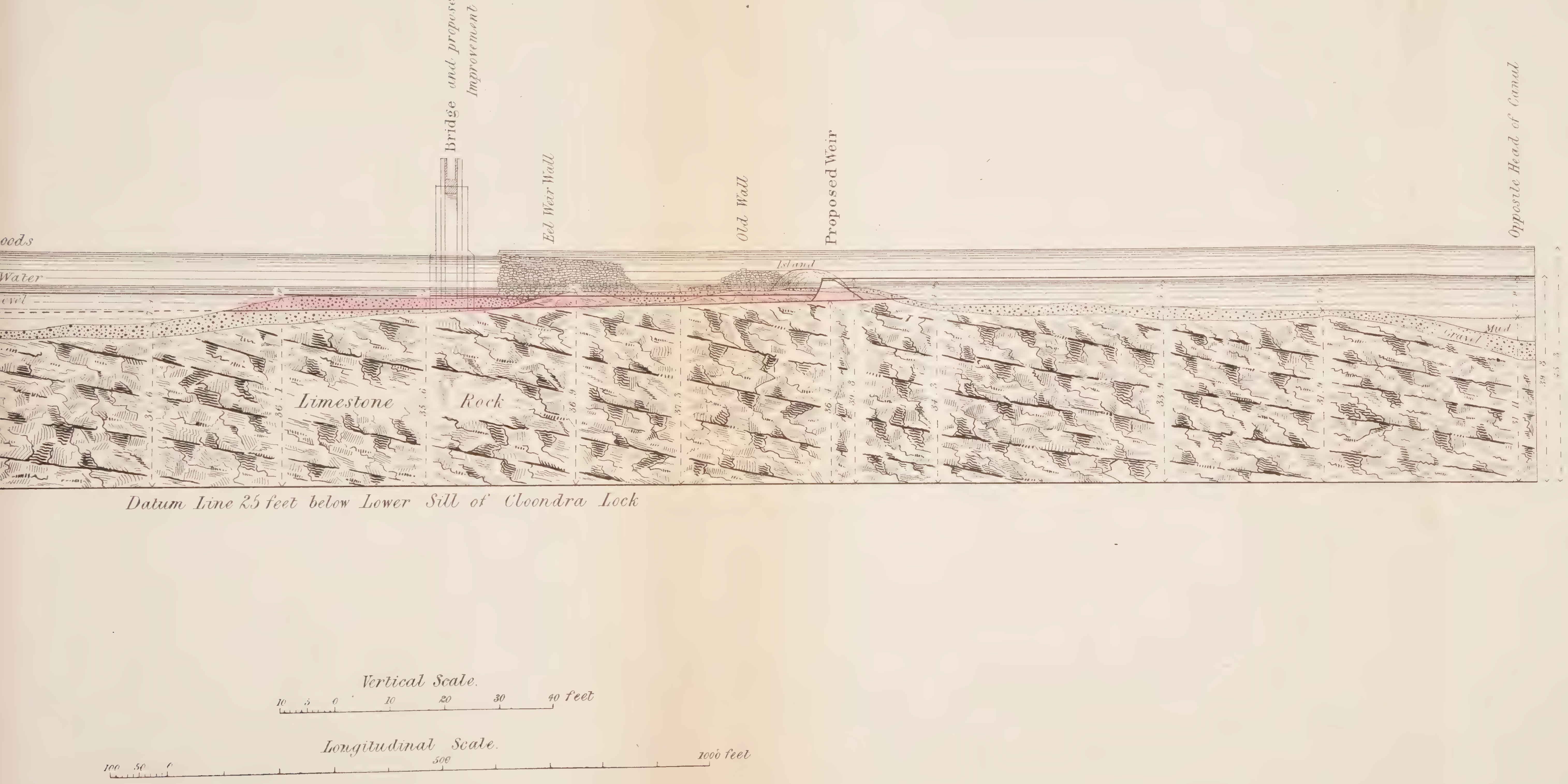


Co Longford.

Note. The Skeleton lines in this Section shew the Arches, Roadway and Parapet of the Present Bridge.

Standidge & Co Litho. London.

Pl. No. 4



SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI WM IV CAP 67

ROOSKEY
LONGITUDINAL SECTION
OF
SHOAL
Shewing Proposed Improvements
1838

THOMAS BARTON, Civil Engineer.
THOMAS H. WHITE, Surveyor.

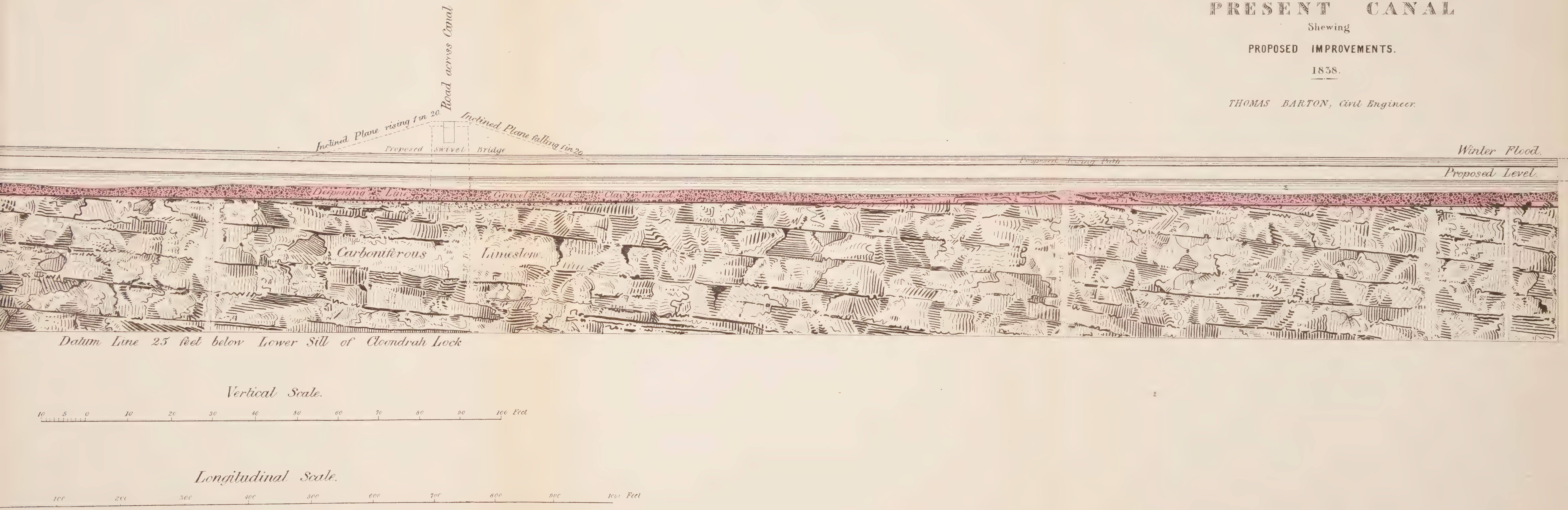
Standidge & Co. Litho. London.

SURVEY
OF THE
RIVER SHANNON,
UNDER THE ACT V. & VI. Wm. IV. CAP. 67.

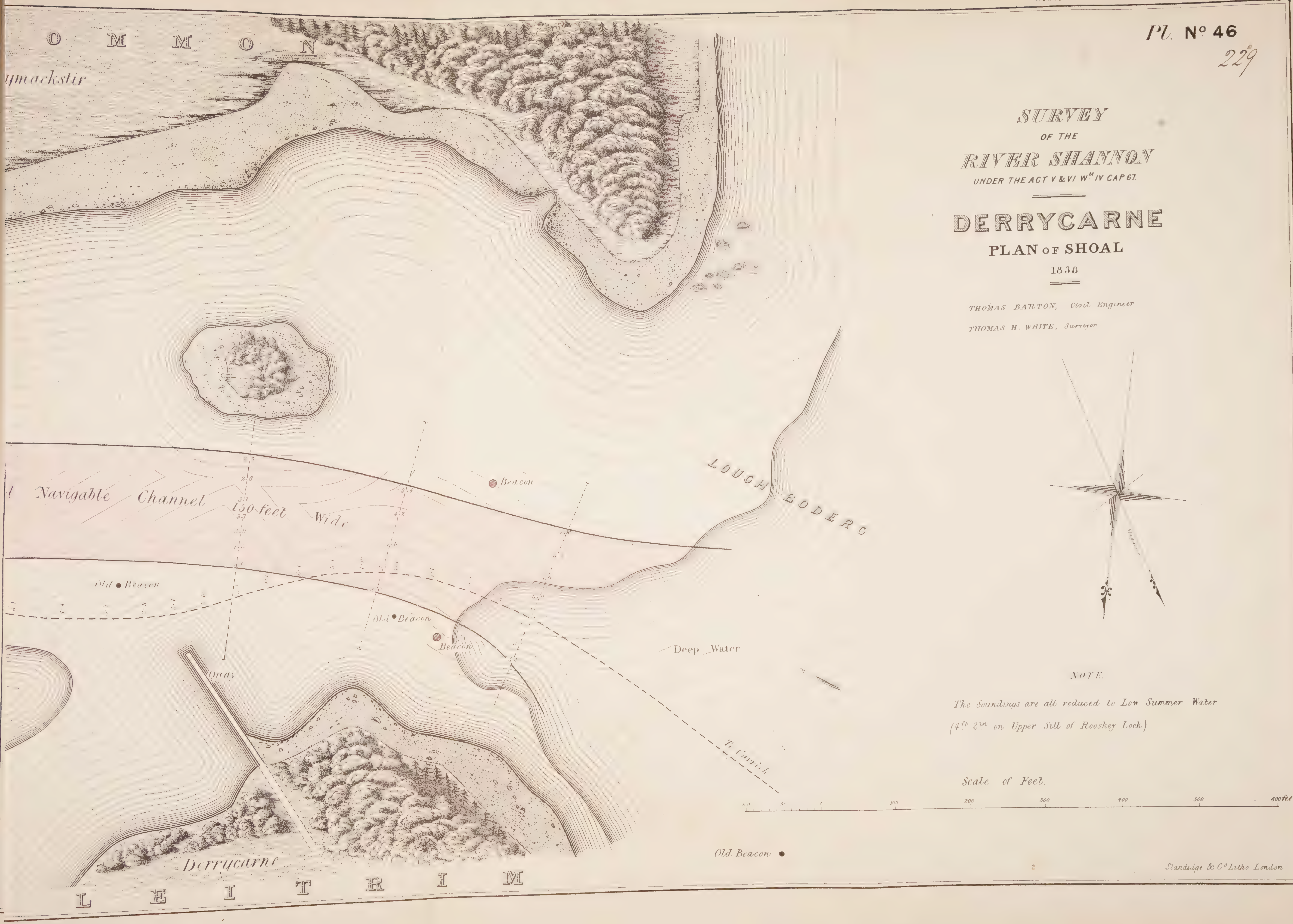
ROOSKEY
LONGITUDINAL SECTION
of
PRESENT CANAL
Shewing
PROPOSED IMPROVEMENTS.
1838.

THOMAS BARTON, Civil Engineer.

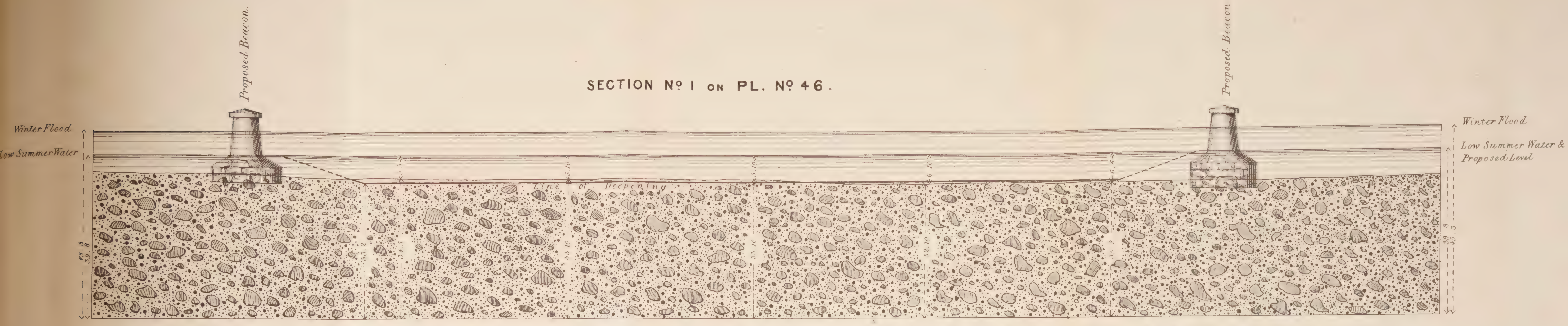
LONGITUDINAL SECTION SEE PL. No. 43



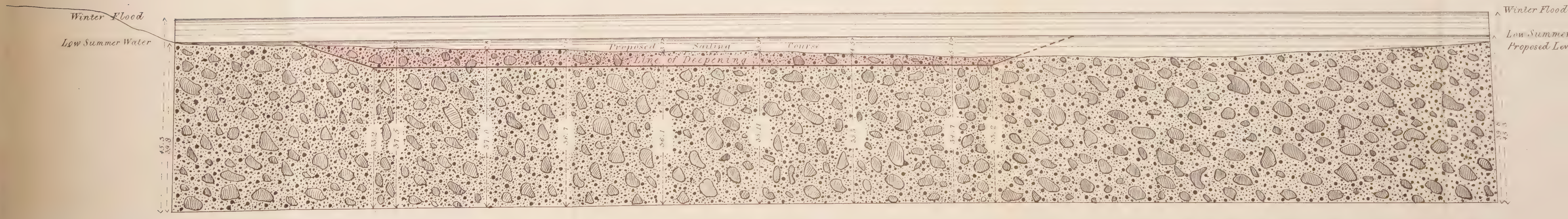
Standidge & Co.

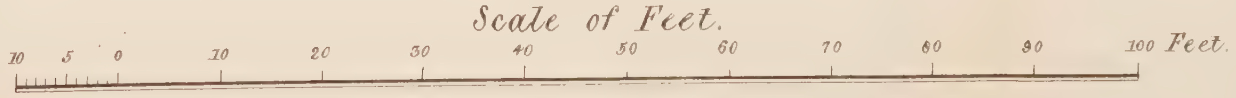

Pl. No 46
229
SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm IV CAP 67.
DERRYCARNE
PLAN OF SHOAL
1838
THOMAS BARTON, Civil Engineer
THOMAS H. WHITE, Surveyor.
NOTE.
The Soundings are all reduced to Low Summer Water
(4ft 2in on Upper Sill of Rooskey Lock)
Scale of Feet.
100
200
300
400
500
600 feet
C O M M O N
ymackstir
Navigable Channel 150 feet Wide
Beacon
Old Beacon
Old Beacon
Beacon
LOUGH BODERG
Deep Water
Quay
To Carrick
Derrycarne
Old Beacon
L E I T R I M
Standidge & Co Litho London

SECTION No. 1 ON PL. No. 46.

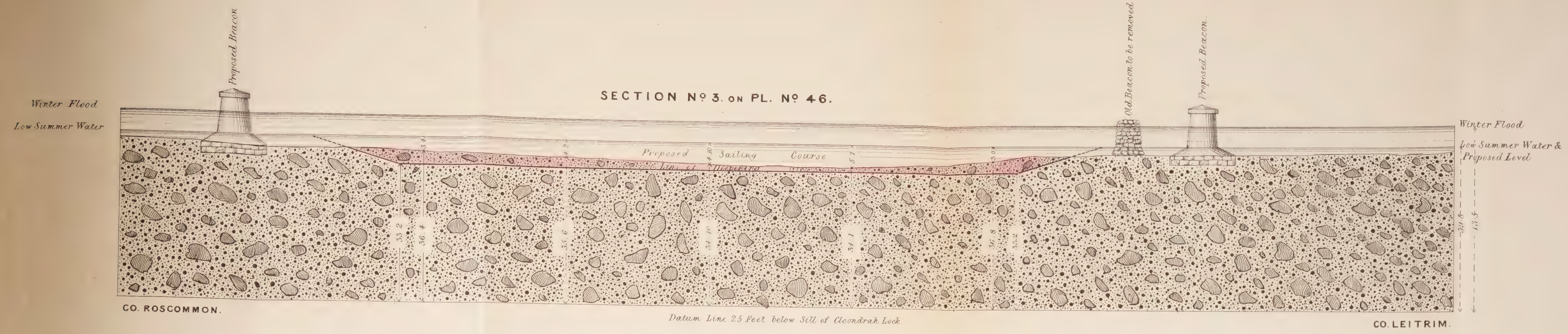


SECTION No. 2 ON PL. No. 46.

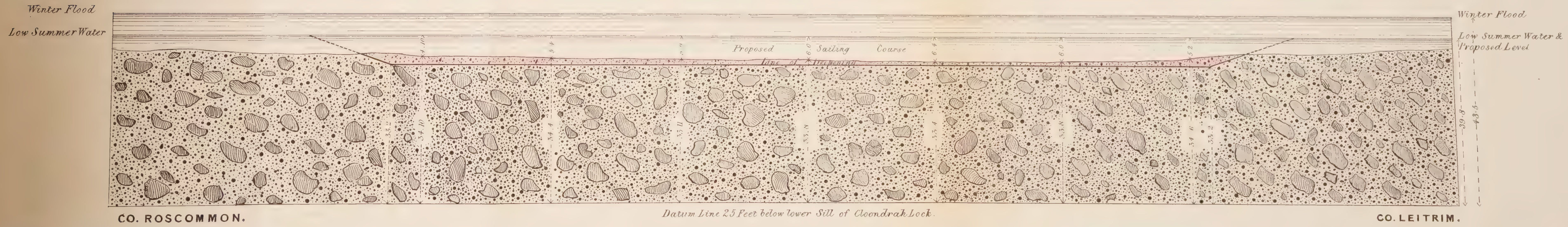




SECTION Nº 3. ON PL. Nº 46.



SECTION Nº 4 ON PL. Nº 46.



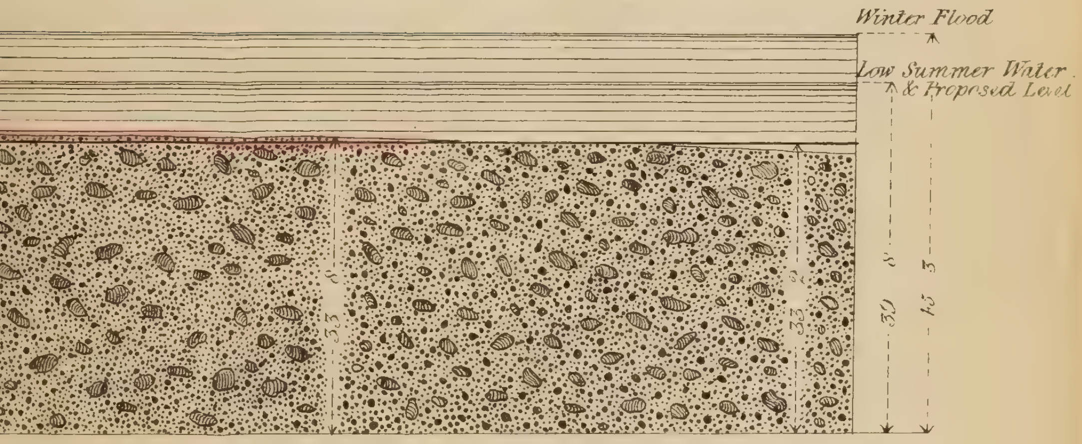
Scale of Feet.

Pl. N° 49.
235

SURVEY
OF THE
RIVER SHANNON,
UNDER THE ACT V AND VI W^M 4TH CAP 67.

DERRYCARNE,
LONGITUDINAL SECTION
OF
SHOAL
1838.

THOMAS BARTON, Civil Engineer



Standidge & C° Litho London

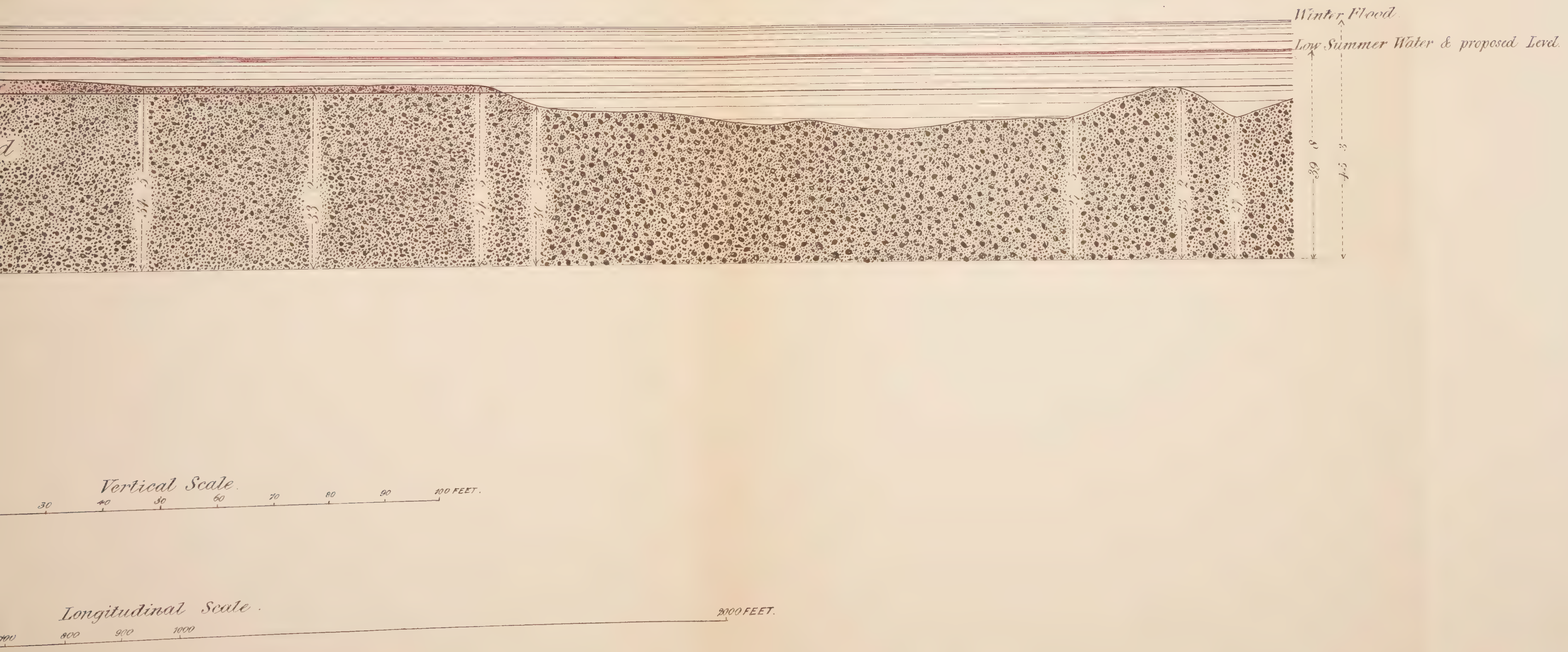
Pl. No. 50

SURVEY
OF THE
RIVER SHANNON
UNDER THE ACT V & VI Wm. IV CAP 67
LOUGH TAP
COUNTY OF ROSCOMMON
PLAN OF SHOAL
Shewing Proposed
IMPROVEMENT
1838
THOMAS BARTON, Civil Engineer.
ROSCOMMON
Moyglass
Beacon
Beacon
feet wide to be deepened
Deep Water
Dancing Stone
Derrylarr
GH TAP
TRIM
Magnetic
Scale 200 Feet to an Inch
100 50 0 100 200 300 400 500 600 700 800 900 1000 Feet
Standidge & Co. Liths. Lon

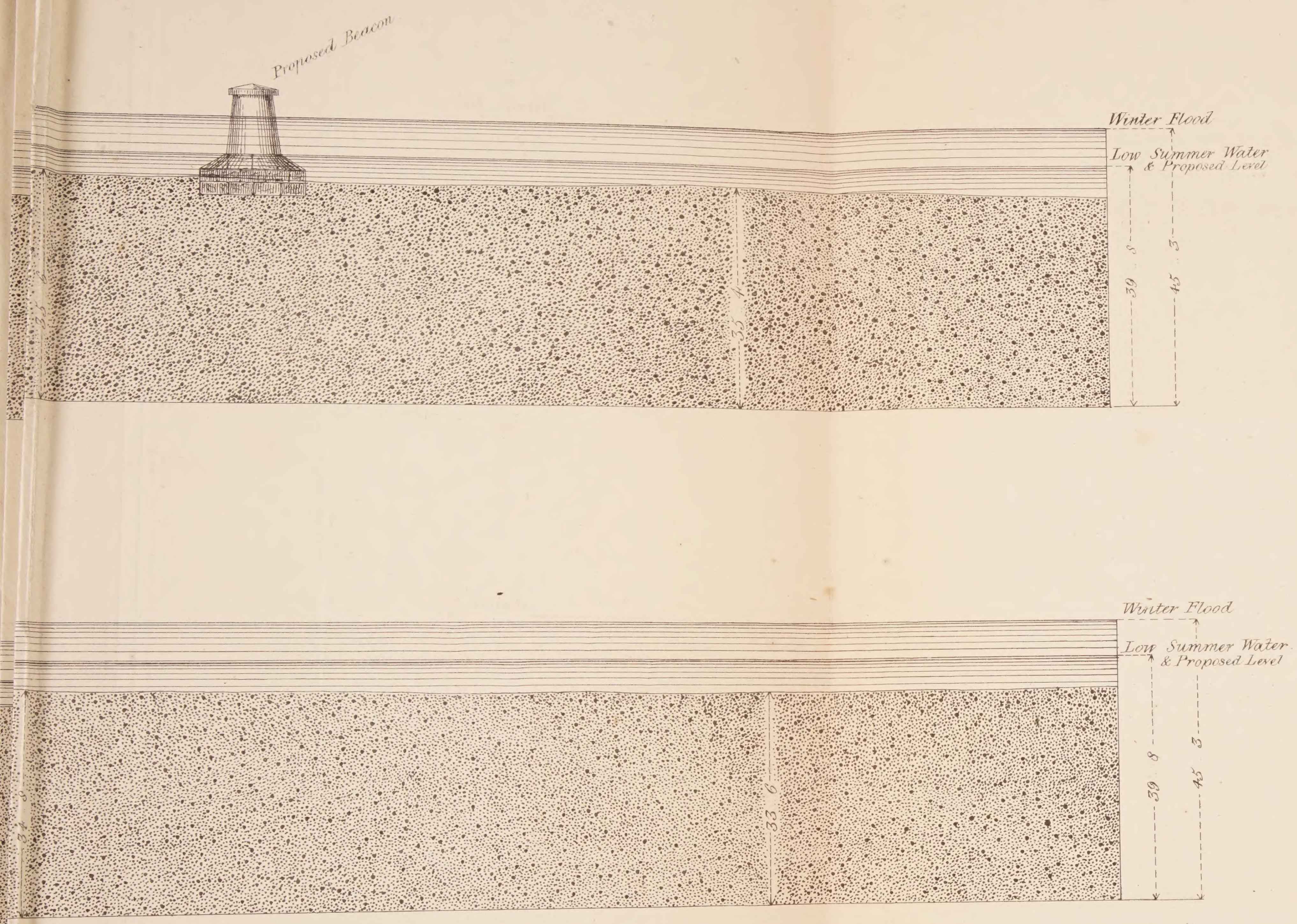
SURVEY
OF THE
RIVER SHANNON,
UNDER THE ACT V AND VI Wm 4 CAP 67.

LOUGH TAP
COUNTY OF ROSCOMMON,
LONGITUDINAL SECTION
OF
SHOAL.
Shewing Proposed Improvements.
1838
THOMAS BARTON, Civil Engineer.

L SECTION SEE PLAN No 50



Pl. N°. 52.
241



SURVEY
OF THE
RIVER SHANNON,
UNDER THE ACT V AND VI W^M 4 CAP 67.

LOUGH TAP,
COUNTY OF ROSCOMMON,
TRANSVERSE SECTION
OF
SHOAL
1838.

THOMAS BARTON, Civil Engineer.

Standidge & C° Litho. London.